BIOCHIMICA et BIOPHYSICA ACTA

AUTHOR and SUBJECT INDEXES

VOLUMES 150-170

1968

EDITORIAL BOARD

E. Antonini (Rome)
H. R. V. Arnstein (London)
A. D. Bangham (Babraham)
H. A. Barker (Berkeley)
M. L. Birnstiel (Edinburgh)
R. L. Blakley (Canberra)
L. Bogorad (Cambridge, Mass.)
L. Bosch (Leiden)
J. Brachet (Brussels)
R. O. Brady (Bethesda)
A. E. Braunstein (Moscow)
H. Breuer (Bonn)
D. H. Brown (St. Louis)
P. N. Campbell (Leeds)
H. Chantrenne (Brussels)
E. Chargaff (New York)
J. A. Cohen (Rijswijk)
R. D. Cole (Berkeley)
C. F. Cori (Boston)
F. L. Crane (Lafayette)
R. K. Crane (New Brunswick)
P. Desnuelle (Marseilles)
E. Diczfalusy (Stockholm)
S. Ebashi (Tokyo)
A. Ehrenberg (Stockholm)
A. Engström (Stockholm)
L. Ernster (Stockholm)
E. F. Gale (Cambridge)
G. A. Gilbert (Birmingham)
F. Gros (Paris)
M. Gruber (Groningen)
M. Grunberg-Manago (Paris)
D. J. Hanahan (Tucson)
O. Hayaishi (Kyoto)
P. J. Heald (Glasgow)
R. W. Holley (San Diego)
V. Jagannathan (Poona)
A. Katchalsky (Rehovoth)
M. Kates (Ottawa)
A. Kepes (Paris)
M. Klingenberg (Munich)
H. L. Kornberg (Leicester)
D. E. Koshland (Berkeley)
M. Kotani (Osaka)
H. A. Krebs (Oxford)
J. Larner (Minneapolis)
L. F. Leloir (Buenos Aires)
W. R. Loewenstein (New York)
F. Lynen (Munich)
V. Massey (Ann Arbor)
A. Meister (New York)
A. Monroy (Palermo)
H. N. Munro (Cambridge, Mass.)
D. M. Needham (Cambridge)
A. Neuberger (London)
H. Neurath (Seattle)
J. M. Olson (Upton)
A. I. Oparin (Moscow)
L. E. Orgel (San Diego)
M. Ottesen (Copenhagen)
L. Packer (Berkeley)
D. F. Parsons (Buffalo)
R. H. Pritchard (Leicester)
D. J. Prockop (Philadelphia)
G. N. Ramachandran (Madras)
H. Rasmussen (Philadelphia)
J. Roche (Paris)
D. Rosen (London)
C. Sadron (Orléans)
G. Schatz (Ithaca)
G. Schramm (Tübingen)
M. Sela (Rehovoth)
P. Siekevitz (New York)
J. Sjövall (Stockholm)
E. C. Slater (Amsterdam)
J. D. Smith (Cambridge)
W. Stoeckenius (San Francisco)
P. Strittmatter (Hartford)
J. M. Tager (Amsterdam)
J. B. Thomas (Utrecht)
T. E. Thompson (Charlottesville)
A. W. K. Tiselius (Uppsala)
H. H. Ussing (Copenhagen)
P. R. Vagelos (St. Louis)
L. L. M. Van Deenen (Utrecht)
K. E. Van Holde (Corvallis)
M. V. Volkenstein (Moscow)
P. H. Von Hippel (Eugene)
E. C. Webb (Brisbane)
H. H. Weber (Heidelberg)
C. Weissmann (Zürich)
J. S. C. Wessels (Eindhoven)
R. Whittam (Leicester)
R. J. P. Williams (Oxford)
T. S. Work (London)
R. Wurmser (Paris)
H. G. Zachau (Munich)

ELSEVIER PUBLISHING COMPANY
AMSTERDAM

AUTHOR INDEX

VOLUMES 150-170

1968

A

Aarsman, A. J., see Van den Bosch, H. (164) 215
Aas. M. and Bremer, J.
Short-chain fatty acid activation in rat liver. A new assay procedure for the enzymes and studies on their intracellular localization (164) 157
Abbot, M. T., Dragila, T. A. and McCroskey, R. P.
The formation of 5-formyluracil by cell-free preparations from Neurospora crassa (169) 1
Abe, H., see Koizumi, T. (151) 628
Abeles, R. H., see Krongelb, M. (167) 473
Abood, L. G., Kurahasi, K., Gruner, E. and Perez del Cerro, M.
Nucleotide content, calcium accumulation, and phosphate metabolism in subcellular fractions of rat brain, (153) 531
Abood, L. G. and Matsubara, A.
Properties of an ATP-binding protein isolated from membranes of nerve endings (163) 539
Abood, L. G., see Yamauchi, A. (150) 181
Abrams, A., see Brown, D. G. (168) 386
Aceves, J., Erlij, D. and Edwards, Ch.
Na^+ transport across the isolated skin of Ambystoma mexicanus (150) 744
Acher, R., Chauvet, J. et Chauvet, M. T.
Les hormones neurohypophysaires des reptiles: Isolement de la mésotocine et de la vasotocine de la vipère Vipera aspis. (154) 255
Acher, R., see Fraefel, W. (154) 615
Acher, R., see Millet, J. (151) 302
Acheson, R. M., see Pau, R. N. (158) 206
Ackman, R. G., see Eldjarn, L. (164) 94
Ackrell, B. A. C., see Kidman, A. D. (159) 185
Acs, G., see Tavitian, A. (157) 33
Adamič, Š.
Sodium influx into denervated rat diaphragm muscle fibre (163) 137
Adams, J. B. and Edwards, A. M.
Enzymic synthesis of steroid sulphates. VII. Association–dissociation equilibria in the steroid alcohol sulphotransferase of human adrenal gland extracts (167) 122
Agosin, M., see Balazs, I. (157) 1
Ahmad, S. I., Barth, P. T. and Pritchard, R. H.
Properties of a mutant of Escherichia coli lacking purine nucleoside phosphorylase (161) 581
Ahmad, S. I., see Barth, P. T. (161) 554
Ahmed, A.
Mechanism of inhibition of protein synthesis by spiramycin (166) 205
Ahmed, A.
Altered ribosomes in spiramycin-resistant mutants of Bacillus subtilis (166) 218
Ahmed, J. and Morris, I.
The effect of 2,4-dinitrophenol and other uncoupling agents on the assimilation of nitrate and nitrite by Chlorella (162) 32
Ainsworth, S. and Bingham, W. S. W.
Reactions of partially oxidised hemoglobin solutions. II. A matrix rank analysis of the initial rates of binding CO (160) 10
Ainsworth, S. and Ford, W. H.
Reactions of partially oxidised hemoglobin solutions. III (160) 18
Ainsworth, S., see Flanagan, M. T. (168) 16
Ainsworth, S., see Ford, W. H. (160) 1
Aithal, H. N., Joshi, V. C. and Ramasarma, T.
Effect of cold exposure on the metabolism of ubiquinone in the rat (162) 66
Åkerman, L., see Kohen, E. (158) 185
Akhtar, M., see Munday, K. A. (166) 748
Aki, K., Ogawa, K. and Ichihara, A.
Transaminases of branched chain amino acids. IV. Purification and properties of two enzymes from rat liver (159) 276
Alais, C., see Jollès, J. (168) 591
Albrecht, I., see Hillman, R. E. (150) 528
Aldin-Cicarelli, S., see Béchet, J. J. (151) 165
Aleem, M. I. H.
Mechanism of oxidative phosphorylation in the chemoautotroph Nitrobacter agilis (162) 338
Alexander, M., see Portman, O. W. (167) 610
Alexander, P., see Maor, D. (157) 627
Algranati, I. D., see González, N. S. (166) 760
Algranati, I. D., see Viñuela, E. (155) 558
Alifano, A., see Papa, S. (153) 303
Allen, A. K. and Rosenberg, H.
The mechanism of action and some properties of serine ethanolamine phosphate synthetase (151) 504
Allen, A. K. and Rosenberg, H.
The biosynthesis of D-serine ethanolamine phosphate in the earthworm Megascolides cameroni (152) 208
Allen, D. W.
Characterization of avian leucosis group-specific antigen from avian myeloblastosis virus (154) 388
Allen, E. and Roy, A. B.
The sulphatase of ox liver. XI. The isoelectric focussing of a purified preparation of sulphatase B (168) 243
Aloof-Hirsch, S., De Vries, A. and Berger, A.
The direct lytic factor of cobra venom. Purification and chemical characterization (154) 53
Alpers, D. H. and Isselbacher, K. J.
Biochemical effects of CCl_4 on rate intestinal mucosa (158) 414
Amakawa, A., see Shimazu, T. (165) 335
Amakawa, A., see Shimazu, T. (165) 349
Ambrus, J. L., see Troll, W. (157) 16
Amiconi, G., see Brunori, M. (154) 315
Amons, R., Van den Bergh, S. G. and Slater, E. C.
The effect of monovalent cations on the dinitrophenol-induced ATPase of rat-liver mitochondria (162) 452
Anderson, J. M. and Thorne, S. W.
The fluorescence properties of manganese-deficient spinach chloroplasts (162) 122
Anderson, N. G. see Cotman, C. (163) 272
Anderson, R. L.
Oxidation of the geometric isomers of $\Delta^{9,12}$-octadecadienoic acid by rat liver mitochondria (152) 531
Andrean, B. A. G., see Mayo, V. S. (169) 297
Andreoli, A. J., see Saxton, R. E. (156) 77
Anfinsen, C. B., see Cuatrecasas, P. (159) 417
Angeletti, P. U., see Calissano, P. (156) 51
Anker, H. S., see Swanson, R. F. (159) 390
Ansari, A. Q., see Munday, K. A. (166) 748

Antia, N. J., see Bilinski, E. (159) 496
Antoni, F., see Holland, J. (157) 663
Antonini, E., see Brunori, M. (154) 315
Antonopoulos, C. A., see Dorner, R. W. (158) 336
Aoki, K., Hiramatsu, K., Tanaka, M. and Kaneshina, S.
    Bovine serum albumin exposed to high pressure (160) 368
Aparicio, P. J., see Paneque, A. (162) 149
Appels, A., see Söling, H. D. (158) 162
Arakawa, I., see Hori, T. (152) 211
Arakawa, K., Minohara, A., Yamada, J. and Nakamura, M.
    Enzymatic degradation and electrophoresis of human angiotensin I. (168) 106
Araki, Y., see Nakatani, T. (156) 210
Arellano, R. R., see Corwin, A. H. (162) 533
Arends, S., see Ristow, H. (157) 178
Argyrakis-Vomvoyannis, M. P.
    Nucleoside diphosphokinase of Escherichia coli infected and uninfected with the RNA-bacteriophage f_2 (166) 593
Arima, K. and Nose, K.
    Studies on bacterial urate:oxygen oxidoreductase. I. Purification and properties of the enzyme (151) 54
Arima, K., Tsukagoshi, N. and Tamura, G.
    Inhibition of the synthesis of alkaline phosphatase of Bacillus megaterium KM by a novel protoplast-bursting factor obtained from Bacillus subtilis 202-7 (163) 121
Arima, K., see Nose, K. (151) 63
Arlinghaus, R. B., Bachrach, H. L. and Polatnick, J.
    Site of foot-and-mouth disease virus-RNA synthesis and some properties of its double-stranded RNA (161) 170
Armentrout, S. A. and Weisberger, A. S.
    Ribonucleoprotein interaction with mammalian monosomes (161) 180
Armstrong, J. McD., see Bornstein, J. (156) 38
Armstrong, R. C.
    A third dissociation constant for tryptophan (158) 174
Arnon, D. E., see Tagawa, K. (153) 602
Arnould, B., see Bèchet, J. J. (151) 165
Aronson, D. L. and Ménaché, D.
    Action of human thrombokinase on human prothrombin and p-tosyl-L-arginine methyl ester (167) 378
Arquilla, E. R., see Morris, J. W. S. (160) 145
Asakawa, T., Wada, H. and Yamano, T.
    Enzymatic conversion of phenylpyruvate to phenylacetate (170) 375
Asami, H., see Nakano, M. (167) 9
Asato, R. N., see Kidman, A. D. (159) 185
Ashworth, R. B., see Brewer, J. M. (168) 359
Askari, A. and Rao, S. N.
    Regulation of AMP deaminase by 2,3-diphosphoglyceric acid: A possible mechanism for the control of adenine nucleotide metabolism in human erythrocytes (151) 198
Askari, A., see Rao, S. N. (151) 651
Askew, W. A., see Candia, O. A. (163) 262
Aspberg, K., Holmén, H. and Porath, J.
    A non-specific phytohemagglutinin found in Vicia cracca (160) 116
Atanasov, B. P., Derzhanski, Al. and Georgieva, A.
    Nuclear magnetic investigation of pre-denaturational conformational transition of metmyoglobin in water solution (160) 255
Atkinson, A., Hunt, S. and Lowe, A. G.
    Manganese activation of a (Na^+-K^+)-dependent ATPase in pig brain microsomes (167) 469
Atkinson, C. and Stacey, K. A.
    Thymineless death induced by cytosine arabinoside (166) 705
Atkinson, D. E., see Jangaard, N. O. (151) 225
Attallah, N. A. and Lata, G. F.
    Steroid-protein interactions studied by fluorescence quenching (168) 321
Attaway, J. A. and Buslig, B. S.
    Conversion of linalool to α-terpineol in citrus (164) 609
Augustinsson, K-B.
    The use of naphthyl esters as substrates in esterase determinations (159) 197
Augusti-Tocco, G., Carestia, C., Grippo, P., Parisi, E. and Scarano, E.
    Thin-layer electrophoresis of nucleic acid derivatives on microcrystalline cellulose (155) 8
Auliac, P., see Pascaud, A. (150) 326
Austin, W. and Nestel, P. J.
    The effect of glucose and insulin in vitro on the uptake of triglyceride and on lipoprotein lipase activity in fat pads from normal fed rats (164) 59
Avi-Dor, Y., see Gutman, M., (162) 506
Avron, M., see Karlish, S. J. D. (153) 878
Aw, S.E., Hobbs, J.R. and Wootton, I.D.P.
    Chromatographic purification of isoenzymes of human α-amylases (168) 362
Axelrod, J. and Daly, J.
    Phenol-O-methyltransferase (159) 472
Axelrod, L. R. and Goldzieher, J. W.
    Free steroid biosynthesis from 5-[4-^{14}C] pregnenolone in normal human adrenal tissue (152) 391
Azuma, M., see Kito, Y. (154) 352
Azzi, A., see Scarpa, A. (150) 473

B

Babcock, R., see Tinoco, J. (164) 129
Babior, B. M.
Coenzyme B_{12} as hydrogen carrier in the ethanolamine deaminase reaction (167) 456
Babior, B. M., see Galper, J. B. (158) 289
Bachhawat, B. K., see Panikkar, K. R. (151) 725
Bachmayer, H. and Kreil, G.
The formation of N-formyl-methionyl-puromycin by intact cells of four different bacteria and a blue-green alga (169) 95
Bachofen, R., see Buchanan, B.B. (162) 607
Bachorik, P. S., see Rogers, A. I. (159) 200
Bachrach, H. L., see Arlinghaus, R. B. (161) 170
Bacon, J. S. D., Jones, D., Farmer, V. C. and Webley, D. M.
The occurrence of α(1-3) glucan in Cryptococcus, Schizosaccharomyces and Polyporus species, and its hydrolysis by a Streptomyces culture filtrate lysing cell walls of Cryptococcus (158) 313
Bade, M. and Gould, B.S.
Proline hydroxylation by oxygen (156) 425
Bader, H., Post, R. L. and Bond, G.H.
Comparison of sources of a phosphorylated intermediate in transport ATPase (150) 41
Bailey, A.D. and Fry, B.A.
Effect of ribonucleic acids on the infectivity of phage λ DNA (166) 726
Bailey, A. J.
Intermediate labile intermolecular crosslinks in collagen fibres (160) 447
Bailin, G. and Bárány, M.
The reaction of myosin with 1-fluoro-2,4-dinitrobenzene (168) 282
Bailin, G., see Bárány, M. (168) 298
Baillie, R.D. and Holms, W.H.
Loss of viability and respiration of Bacillus subtilis grown in peptone medium supplemented with glucose (170) 442
Baird, G. D. and Herriman, I. D.
Amino acid incorporation into ribonucleoprotein particles prepared from rabbit mammary glands during pregnancy and lactation (166) 162
Bairos, M.A., see Bairos V.A. (168) 567
Bairos, V.A. and Bairos, M.A.
Two procedures for accelerated separation of amino acids by column chromatography (168) 567
Baker, N. and Együd, L. G.
3-Deoxy-D-glucosulose in fed and fasted mouse livers (165) 293
Baker, P. F. and Blaustein, M. P.
Sodium-dependent uptake of calcium by crab nerve (150) 167
Baker, P.F., Foster, R.F. Gilbert, D.S. and Shaw, T.I.
Sodium transport and perfused axons (163) 560
Baker, P. F. and Manil, J.
The rates of action of K^+ and ouabain on the sodium pump in squid axons (150) 328
Baker, R. D., Wall, M. J., Watson, S. and Long, J. L.
Transmural electrical potential across rat jejunum: Effects of eversion and rapid temperature changes (150) 649
Bakkeren, J. A. J. M. and Bonting, S. L.
Studies on (Na^+-K^+)-activated ATPase XX. Properties of (Na^+-K^+)-activated ATPase in rat liver (150) 460
Bakkeren, J. A. J. M. and Bonting, S. L.
Studies on (Na^+-K^+)-activated ATPase. XXI. Changes in (Na^+-K^+)-activated ATPase activity and ouabain-sensitive $^{86}Rb^+$ uptake rate in regenerating rat liver (150) 467
Balakrishnan, G., see Possmayer, F. (164) 79
Balazs, E. A., see Bettelheim, F. A. (158) 309
Balazs, I. and Agosin, M.
The effect of 1,1,1-trichloro-2,2-bis-(p-chlorophenyl) ethane on RNA metabolism in Musca domestica L. (157) 1
Balcavage, W.X., Beale, M. Chasen, B. and Mattoon, J.R.
Effect of filipin on rat-liver and yeast mitochondria (162) 525
Balcavage, W. X. and Mattoon, J. R.
Properties of Saccharomyces cervisiae mitochondria prepared by a mechanical method (153) 521
Baldry, C. W., Cockburn, W. and Walker, D. A.
Inhibition, by sulphate, of the oxygen evolution associated with photosynthetic carbon assimilation (153) 476
Baldwin, B.C., Clarke, C.B. and Wilson, I.F.
Paraquat in chloroplast (162) 614
Baldwin, J.J. and Cornatzer, W.E.
Rat kidney glycerylphosphorylcholine diesterase (164) 195
Baliga, B. S., see Pronczuk, A. W. (157) 204
Balny, C., see Leterrier, F. (154) 444
Bandemer, S.L., see Evans, R.J. (164) 566
Banerjee, R.K. and Roy, A. B.
Kinetic studies of the phenol sulphotransferase reaction (151) 573
Bannister, T.T. and Rice, G.
Parallel time courses of oxygen evolution and chlorophyll fluorescence (162) 555
Bannister, W.H., Salisbury, C.M. and Wood, E.J.
Ultraviolet fluorescence of human erythrocuprein (168) 392
Bannister, W. H., see Wood, E. J. (154) 10
Bárány, K., see Bárány, M. (168) 298
Bárány, M., Bárány, K. and Bailin, G.
Reactivity of actomyosin and myosin with 1-fluoro-2,4-dinitrobenzene in vivo and in vitro (168) 298
Bárány, M., see Bailin, G. (168) 282
Barbason, H., see Verly, W. G. (161) 548
Barber, G. A.
The synthesis of guanosine 5'-diphosphate D-rhamnose by enzymes of a higher plant (165) 68
Barber, J.
Measurement of the membrane potential and evidence for active transport of ions in Chlorella pyrenoidosa (150) 618
Barber, J.
Sodium efflux from Chlorella pyrenoidosa (150) 730
Barber, J.
The influx of potassium into Chlorella pyrenoidosa (163) 141
Barber, J.

The efflux of potassium from Chlorella pyrenoidosa (163) 531

Barbiroli, B., see Caldarera, C. M. (161) 156

Barclay, M., see Skipski, V. P. (152) 10

Barden, R. E., see Zahler, W. L. (164) 1

Bardos, T. J., see Troll, W. (157) 16

Barenholz, Y. and Gatt, S.

Separation of sphingosine, dihydrosphingosine and phytosphingosine by chromatography on columns of silica gel (152) 790

Barker, A.V.

Ammonium interactions with proteins (168) 447

Barlow, J. J. and Mathias, A. P.

The labelling in vivo of nuclear and cytoplasmic RNA of pigeon reticulocytes (166) 379

Barnes, F. W., see Kulick, R. J. (167) 1

Barnhart, M.I., see Heberlein, P.J. (168) 195

Barns, R. J. and Keech, D. B.

The essential thiol group of sheep kidney mitochondrial phosphoenolpyruvate carboxykinase (159) 514

Baron, C., see Brown, D.G. (168) 386

Baron, G., Kaminski, M. et Jutisz, M.

Etude des propriétés immunologiques de l'hormone folliculo-stimulante de mouton au cours de sa purification (168) 555

Barratt, M. D., Green, D. K. and Chapman, D.

Spin-labelled lipid-protein complexes (152) 20

Barrett, J. F., see Schally, A. V. (154) 595

Barrowman, J., see Morgan, R. G. H. (167) 355

Barry, J. M., see Leake, R. E. (157) 198

Barth, P. T., Beacham, I. R., Ahmad, S. I. and Pritchard, R. H.

The inducer of the deoxynucleoside phosphorylases and deoxyriboaldolase in Escherichia coli (161) 554

Barth, P. T., see Ahmad, S. I. (161) 581

Barth, P. T., see Beacham, I. R. (166) 589

Bartle, K.D., Fletcher, J.C., Jones, D.W. and L'Amie, R.

Nuclear magnetic resonance spectra of bis(2-amino-2-carboxyethyl)trisulphide and other sulphur-containing amino acids relevant to wool structure (160) 106

Bartlett, G. R.

Phosphorus compounds in the human erythrocyte (156) 221

Bartlett, G. R.

Glucose and mannose diphosphates in the red blood cell (156) 231

Bartlett, G. R.

The metabolism of deoxyribonucleoside by the human erythrocyte (156) 254

Bartlett, G. R. and Bucolo, G.

The metabolism of ribonucleoside by the human erythrocyte (156) 240

Bartlett, P., see Johnston, C.C. (163) 417

Bartley, J. A. and Chalkley, R.

The viscosity of nucleohistone in urea (160) 224

Bartley, W., see Getz, G. S. (152) 325

Bartnicki-Garcia, S. and Reyes, E.

Chemical composition of sporangiophore walls of Mucor rouxii (165) 32

Bartnicki-Garcia, S. and Reyes, E.

Polyuronides in the cell walls of Mucor rouxii (170) 54

Bartsch, R. G., see Cusanovich, M. A. (153) 397

Bartsch, R. G., see Meyer, T. E. (153) 854

Baskin, L. S. and Leslie, R. B.

Effect of substrates and products on beef brain microsomal $(Na^+ + K^+ + Mg^{2+})$-ATPase activity (159) 509

Bass, S. T., see Rodriguez, P. (167) 199

Bassham, J. A., Kirk, M. and Jensen, R. G.

Photosynthesis by isolated chloroplasts. I. Diffusion of labeled photosynthetic intermediates between isolated chloroplasts and suspending medium (153) 211

Bassham, J. A., Sharp, P. and Morris, I.

The effect of Mg^{2+} concentration on the pH optimum and Michaelis constants of the spinach chloroplast ribulosediphosphate carboxylase (carboxydismutase) (153) 898

Bassham, J. A., see Jensen, R. G. (153) 219

Bassham, J. A., see Jensen, R. G. (153) 227

Bassham, J.A., see Ng, K. (162) 254

Bastide, F. et Jard, S.

Actions de la noradrénaline et de l'ocytocine sur le transport actif de sodium et la perméabilité à l'eau de la peau de grenouille. Rôle du 3',5'-AMP cyclique (150) 113

Bastide, F., see Jard, S. (150) 124

Basu, S., see Mitra, S. (155) 143

Batlle, A. M. del C., see Tigier, H. A. (151) 300

Batoerham, T., see Young, I. G. (165) 567

Batt, R. D., see Winterbourn, C. C. (152) 255

Batt, R. D., see Winterbourn, C. C. (152) 412

Bauer, K., see Lüttge, U. (150) 452

Bauer, Š., see Biely, P. (156) 432

Bauer, Š., see Biely, P. (158) 487

Bauer, Š., see Farkaš, V. (165) 63

Baumberg, S., see Itikawa, H. (159) 547

Baxt, W., see Lande, S. (154) 429

Bayev, A. A., see Mirzabekov, A. D. (166) 68

Bayev, A. A., see Mirzabekov, A. D. (166) 75

Bdolah, A. and Feingold, D. S.

Uridine diphosphate-D-glucose dehydrogenase of hen oviduct (159) 176

Beacham, I. R., Barth, P. T. and Pritchard, R. H.

Constitutivity of thymidine phosphorylase in deoxyriboaldolase negative strains: Dependence on thymine requirement and concentration (166) 589

Beacham, I. R., see Barth, P. T. (161) 554

Beale, M., see Balcavage, W.X. (162) 525

Beaty, C., see Cotlier, E. (150) 705

Beaudreau, G. S., see Olson, K. C. (161) 532

Beaven, G.H. and Gratzer, W.B.

Nitration of ribonuclease (168) 456

Béchet, J. J., Chevalier, J., Labouesse, J., Arnould, B., Aldin-Cicarelli, D. et Yon, J.

Influence de la force ionique sur l'activité de la trypsine acetylée (151) 165

Beck, C. and Tappel, A. L.

Rat-liver lysosomal β-glucosidase: A membrane enzyme (151) 159

Beck, G., Prevost, C., Ebel, J.-P., Kallmeyer, M.-A. et Clavert, J.

Etude de l'incorporation de la phénylalanine dans les protéines par un système acellulaire de foie de poulet en fonction de l'âge (169) 248

Bednárová, H., see Kováč, L. (153) 32

Beevers, H., see Powell, G. L. (151) 708

Behal, F. J., see Center, M. S. (151) 698

Behrman, R.E., see Portman, O.W. (167) 610

Beiderbeck, R. and Richter, G.

On the nature of DNA-associated RNA in Chlorella cells (157) 658

Beier, H. M.

Uteroglobin: A hormone-sensitive endometrial protein involved in blastocyst development (160) 289

Belfrage, P.

Metabolism of chyle triglycerides in the liver. II. Distribution of radioactivity be-

tween subcellular components after the intravenous injection of glycerol–and fatty acid–labeled chyle into the carbohydrate–fed rat (152) 266

Belitser, V. A., Varetskaja, T. V. and Malneva, G. V.
  Fibrinogen–fibrin interaction (154) 367

Bell, J.B.G., Vinson, G.P., Hopkin, D.J. and Lacy, D.
  Pathways for androgen biosynthesis from [7α-^{3}H]pregnenolone and [4-^{14}C]progesterone by rat testis interstitium in vitro (164) 412

Bell, K., McKenzie, H. A. and Shaw, D. C.
  Amino acid composition and peptide maps of β-lactoglobulin variants (154) 284

Bell, Jr., O.E. and White, Jr., H.B.
  Plasmalogen metabolism in developing rat brain: Aldehydes as a direct precursor in the formation of the vinyl ether linkage (164) 441

Bellair, J. T.
  The rapid isolation of a regenerating rat liver DNA nucleotidyltransferase fraction which shows a preference for native DNA as primer (161) 119

Bello, J., see Doyle, R. J. (160) 274

Bello, L. J.
  Synthesis of DNA-like RNA in synchronized cultures of mammalian cells (157) 8

Bello, O., see Rodriguez, P. (151) 694

Belocopitow, E., see Torres, H. N. (156) 206

Belyavin, G., see Kendal, A. P. (165) 419

Bemski, G. and Nagel, R. L.
  Electron spin resonance of four human hemoglobins (154) 592

Ben Abdeljlil, A., see Palla, J. C. (158) 25

Ben Abdelkader, A., see Mazliak, P. (152) 414

Benedetti, E. L., see Emmelot, P. (150) 364

Ben–Hur, E. and Ben–Ishai, B.
  Trans-syn thymine dimers in ultraviolet-irradiated denaturated DNA: Identification and photoreactivability (166) 9

Ben–Ishai, B., see Ben–Hur, E. (166) 9

Bensch, K., see Manitius, A. (150) 563

Benson, A. A., see Ji, T. H. (150) 676

Benson, A. A., see Ji, T. H. (150) 686

Bentley, R., see Hauge, J. G. (159) 398

Benuck, M. and D'Adamo, Jr., A. F.
  Acetyl transport mechanisms: Metabolism of N-acetyl-L-aspartic acid in the non-nervous tissues of the rat (152) 611

Benzonana, G.
  Sur le rôle des ions calcium durant l'hydrolyse des triglycérides insolubles par la lipase pancréatique en présence de sels biliaires (151) 137

Benzonana, G. and Desnuelle, P.
  Action of some effectors on the hydrolysis of long-chain triglycerides by pancreatic lipase (164) 47

Berberich, M. A., see Venetianer, P. (166) 124

Berbey, B., see Hemon, P. (170) 235

Berenson, M. P., see Kleihauer, E. F. (154) 220

Bergamini, E., see Bombara, G. (150) 226

Berger, A., see Aloof–Hirsch, S. (154) 53

Berke, G., see Schejter, A. (162) 459

Berkowitz, E., see Troll, W. (157) 16

Berlinguet, L. and Normand, A.
  Effects of polyamino acids, histones and heparin on amino acid incorporation into ribosomal proteins from rat liver (161) 509

Bernard, E., see Torres, H. N. (156) 206

Bernardi, A. and Bernardi, G.
  Studies on acid hydrolases. IV. Isolation and characterization of spleen exonuclease (155) 360

Bernardi, A. and Bernardi, G.
  Studies on acid hydrolases. V. Isolation and characterization of spleen nucleoside polyphosphatase (155) 371

Bernardi, G. and Kawasaki, T.
  Chromatography of polypeptides and proteins on hydroxyapatite columns (160) 301

Bernardi, G., see Bernardi, A. (155) 360

Bernardi, G., see Bernardi, A. (155) 371

Bernardi, G., see Carrara, M. (155) 1

Bernlohr, R.W., see Laishley, E.J. (167) 547

Bernlohr, R. W., see Leitzmann, C. (151) 449

Bernlohr, R. W., see Leitzmann, C. (151) 461

Bernstein, R. S., Navalainen, T., Schraer, R. and Schraer, H.
  Intracellular distribution and role of carbonic anhydrase in the avian (Gallus domesticus) shell gland mucosa (159) 367

Bertagnolio, G., see Berthillier, G. (170) 140

Berthillier, G., Got, R. et Bertagnolio, G.
  Biochemie de l'α-macroglobuline de lapin. IV. Effet sur l'activité estérasique de la trypsine et de la chymotrypsine (170) 140

Best, G. K., Best, N. H., Ferguson, D. V. and Durham, N. N.
  Adsorption of vancomycin by sensitive and resistant organisms (165) 558

Best, N. H., see Best, G. K. (165) 558

Bettelheim, F. A. and Balazs, E. A.
  Light-scattering patterns of the vitreous humor (158) 309

Bettelheim, F. A. and Block, A.
  Water vapor sorption of bovine and porcine submaxillary mucins (165) 405

Betterton, H., Fjellstedt, T., Matsuda, M., Ogur, M. and Tate, R.
  Localization of the homocitrate pathway (170) 459

Betts, G. F. and Evans, H. J.
  The effect of cations on the electrophoretic mobility and substrate binding properties of pyruvate kinase (167) 190

Betts, G. F. and Evans, H. J.
  The inhibition of univalent cation activated enzymes by tris (hydroxymethyl) aminomethane (167) 193

Beugeling, T.
  Photochemical activities of K$_3$Fe(CN)$_6$-treated chromatophores from Rhodospirillum rubrum (153) 143

Bever, A. T., see Coleman, R. L. (151) 267

Bevill, R. D., see Salo, W. L. (151) 484

Bewley, T. A., Dixon, J. S. and Li, C. H.
  Human pituitary growth hormone. XVI. Reduction with dithiothreitol in the absence of urea (154) 420

Beyersmann, D. and Schramm, G.
  Kinetic studies on DNA polymerase (159) 64

Bezemer–Sybrandy, S. M., Tasseron–de Jong, J. G. and Veldstra, H.
  Effect of visible light on kinetin solutions (161) 568

Bhatnagar, R.S., Kivirikko, K.I. and Prockop, D. J.
  Studies on the synthesis and intracellular accumulation of protocollagen in organ culture of embryonic cartilage (154) 196

Bhattacharjee, S.B., see Ganguli, N. (169) 545

Bhatti, T. and Clamp, J.R.
  Determination of molecular weight of glycopeptides by exclusion chromatography (170) 206

- Bhose, A., see Mukherjee, S. (164) 357
- Biale, Y., Gorin, E. and Shafrir, E.
  - Characterization of tissue lipolytic and esterolytic activities cleaving full and partial glycerides (152) 28
- Biava, C., see Oppenheim, J. (161) 386
- Biddle, F., see Kendal, A. P. (165) 419
- Bieber, L. L.
  - Incorporation of trimethylaminoethylphosphonic acid and dimethylaminoethylphosphonic acid into lipids of housefly larvae (152) 778
- Bielka, H. and Junghahn, I.
  - Studies on tissue specificities of nuclear and ribosomal RNA using the DNA x RNA hybridization technique (166) 698
- Bielka, H., Schultz, I. and Böttger, M.
  - Isolation and properties of DNA from eggs and gastrulae of Ascaris lumbricoides (157) 209
- Bielka, H., see Grummt, F. (161) 253
- Biely, P. and Bauer, Š.
  - The formation of guanosine diphosphate 2-deoxy-D-glucose in yeast (156) 432
- Biely, P., Farkaš, V. and Bauer, Š.
  - Incorporation of 2-deoxy-D-glucose into glycogen (158) 487
- Biely, P., see Farkaš, V. (165) 63
- Biermann, L. and Glantz, M. D.
  - Isolation and characterization of β-galactosidase from Saccharomyces lactis (167) 373
- Biggins, D. R. and Dilworth, M. J.
  - Control of pyruvate phosphoroclastic activity in extracts of Clostridium pasteurianum by ADP and acetyl phosphate (156) 285
- Bihler, I.
  - The action of cardiotonic steroids on sugar transport in muscle, in vitro (163) 401
- Bilinski, E., Antia, N. J. and Lau, Y. C.
  - Characterization of phospholipase C from a marine planktonic alga (Monochrysis lutheri) (159) 496
- Binette, J. P.
  - Patterns of polymorphism of α_1-acid glycoprotein in different species (154) 234
- Bingham, W. S. W., see Ainsworth, S. (160) 10
- Birnstiel, M. L., see Evans, D. (166) 274
- Bishop, H.L. and Doi, R.H. (169) 278
- Bishop, N.I., see Pratt, L. H. (153) 664
- Bishop, N. I., see Pratt, L. H. (162) 369
- Bishop, N. I., see Senger, H. (157) 417
- Bixby, E. M., see Efron, M. L. (165) 238
- Bizzini, B., see Mangalo, R. (168) 583
- Björkstén, F.
  - Participation of horseradish oxyperoxidase (compound III) in interenzymic reaction steps (151) 309
- Black, Jr., C. C.
  - Photosynthetic phosphorylation and associated reactions in the presence of a new group of uncouplers: Salicylanilides (162) 294
- Blacklow, R. S. and Marshall, R. D.
  - Variations in the carbohydrate content of rabbit γG-globulin (165) 179
- Bladé, E., Blat, C. et Harel, L.
  - Interaction entre cellules. II. Variation du transport actif des acides aminés en fonction de la concentration en cellules (156) 157
- Bladé, E. et Harel, L.
  - Interaction entre cellules. I. Influence de la concentration on cellules sur l'accumulation des acides aminés et la synthèse protéique (156) 148
- Blakeley, R. L., see Runnegar, M. T. C. (167) 632
- Blank, M., see Britten, J. S. (159) 160
- Blat, C., see Bladé, E. (156) 157
- Blaustein, M. P., see Baker, P. F. (150) 167
- Blears, D. J. and Danyluk, S. S.
  - Proton wide-line nuclear magnetic resonance spectra of hydrated proteins (154) 17
- Blobel, G. and Potter, V. R.
  - Distribution of radioactivity between the acid-soluble pool and the pools of RNA in the nuclear, non-sedimentable and ribosome fractions of rat liver after a single injection of labeled orotic acid (166) 48
- Block, A., see Bettelheim, F. A. (165) 405
- Blodgett, L. W. and Yielding, K. L.
  - Comparison of chloroquine binding to DNA, and polyadenylic and polyguanylic acids (169) 451
- Bloemendal, H., see Hoenders, H. J. (160) 283
- Blombäck, B., see Iwanaga, S. (160) 280
- Bloomfield, V. A., see Filson, D. P. (155) 169
- Blum, J. J., see Wittels, B. (152) 220
- Blum, N., see Kruh, J. (161) 215
- Blume, K. G., Rüdiger, H. W. and Löhr, G. W.
  - Electrophoresis of glutathione reductase from human red blood cells (151) 686
- Blumenthal, A., see Ezekiel, D. H. (161) 494
- Boardman, N. K. and Thorne, S. W.
  - Studies on a barley mutant lacking chlorophyll b. II. Fluorescence properties of isolated chloroplasts (153) 448
- Bobb, D.
  - Spectral properties of chymotrypsinogen-DNA complexes and the effects of heating (155) 566
- Bobb, D.
  - Interaction of actinomycin D with the chymotrypsinogen-DNA complex (169) 457
- Bobb, D., see Hofstee, B. H. J. (168) 564
- Bock, R. M., see Lee, S. Y. (151) 126
- Bock, R. M., see Nakao, Y. (151) 114
- Bodansky, O., see Song, C. S. (150) 300
- Bogart, D. B., see Grisolia, S. (151) 298
- Böhme, K.-H., see Schubert, K. (152) 401
- Bøhmer, Th.
  - The formation of propionylcarnitine in isolated rat liver mitochondria (164) 487
- Bøhmer, Th. and Bremer, J.
  - Propionylcarnitine in animal tissue (152) 440
- Bøhmer, Th. and Bremer, J.
  - Propionylcarnitine, Physiological variations in vivo (152) 559
- Bojanowska, K. and Williamson, D. H.
  - Serine dehydratase activity in livers of phlorrhizin-treated rats and the hepatic serine plus threonine concentration (159) 560
- Bojesen, E., see Schaumburg, B. P. (170) 172
- Bole, G. G., Jr. and Leutz, J. C.
  - Metabolism of 5'-nucleotide monosaccharides in inflammatory connective tissue (156) 217
- Bollack, C., see Louisot, P. (155) 38
- Bollum, F. J., see Setlow, J. K. (157) 233
- Bombara, G. and Bergamini, E.
  - α-Aminoisobutyric acid uptake in vitro by the rat extensor digitorum longus muscle after denervation and tenotomy (150) 226
- Bomsel, J.-L. and Pradet, A.
  - Study of adenosine 5'-mono-, di- and triphosphates in plant tissues. IV. Regulation

of the level of nucleotides, in vivo, by adenylate kinase: Theoretical and experimental study (162) 230
Bonaly, R. et Malenge, J. P.
Biosynthèse des caroténoïdes cycliques chez Rhodotorula mucilaginosa et Rhodotorula aurantiaca (164) 306
Bond, G. H., see Bader, H. (150) 41
Bonner, J., see Fambrough, D. (154) 601
Bonnet-Smits, E. M., see Van Duin, J. (155) 444
Bono, Jr., V. H., see Kohn, K. W. (155) 121
Bonting, S. L., see Bakkeren, J. A. J. M. (150) 460
Bonting, S. L., see Bakkeren, J. A. J. M. (150) 467
Bonting, S. L., see Daemen, F. J. M. (163) 212
Bonting, S. L., see De Pont, J. J. H. H. M. (163) 204
Bonting, S. L., see Hafkenscheid, J. C. M. (151) 204
Booij, H. L., see Deierkauf, F. A. (150) 214
Booyse, F. M., Hoveke, Th. P. and Rafelson, Jr., M. E.
Studies on human platelets. II. Protein synthetic activity of various platelet populations (157) 660
Booyse, F. M. and Rafelson, Jr., M. E.
Studies on human platelets. I. Synthesis of platelet protein in a cell-free system (166) 689
Borghi, S., see Botré, C. (154) 360
Borgström, B., see Erlanson, C. (167) 629
Borgström, B., see Morgan, R. G. H. (167) 355
Bornstein, J., Armstrong, J. McD. and Jones, M. D.
The effect of a growth hormone fraction on the activity of glyceraldehyde-3-phosphate dehydrogenase (156) 38
Bornstein, J., Krahl, M. E., Marshall, L. B., Gould, M. K. and Armstrong, J. McD.
Pituitary peptides with direct action on the metabolism of carbohydrates and fatty acids (156) 31
Boroff, D. A., see DasGupta, B. R. (168) 522
Borrebaek, B., see Spydevold, Ø. (167) 291
Borst, P., see Ruttenberg, G. J. C. M. (157) 429
Borst, P., see Van Bruggen, E. F. J. (161) 402
Bortz, W. M.
Noradrenalin-induced increase in hepatic cholesterol synthesis and its blockade by puromycin (152) 619
Bos, C. J., see Emmelot, P. (150) 341
Bos, C. J., see Emmelot, P. (150) 354
Bosch, L., see Hoogendam, B. W. (157) 579
Bosch, L., see Reinecke, C. J. (157) 566
Bosch, L., see Van Duin, J. (155) 444
Bosch, L., see Verhoef, N. J. (155) 456
Bosmann, H. B. and Jackson, J. J.
Glycoprotein structure: The carbohydrate of bovine corneal collagen (170) 6
Bosselaar, A., see Hoogendam, B. W. (157) 579
Bostwick, C. D., see Tischer, R. G. (156) 403
Botré, C., Marchetti, M. and Borghi, S.
Specificity effects of cation binding to the macroion in the bovine serum albumin--histamine interaction (154) 360
Botte, V. and Koide, S. S.
Enzymic hydrolysis of steroid phosphates (152) 396
Böttger, M., see Bielka, H. (157) 209
Bottemley, S. S. and Smithee, G. A.
Characterization and measurement of Δ-aminolaevulinate synthetase in bone marrow cell mitochondria (159) 27
Bouchet, M., see Mazza, G. (167) 89
Bouchilloux, S., see Cheftel, C. (170) 15
Bouchilloux, S., see Cheftel, C. (170) 29
Boucrot, P. et Clément, J.
Étude de l'apport d'acides gras endogènes dans les triglycérides des chylomicrons lymphatiques chez le rat après administration de divers triglycérides mixtes marqués (164) 558
Bourgaux, P., see Bourguignon, M-F. (169) 476
Bourgoin, D., see Cattan, D. (161) 56
Bourguet, J.
Cinétique de la perméabilisation de la vessie de grenouille par l'ocytocine. Rôle du 3',5'-AMP cyclique (150) 104
Bourguignon, M-F.
A denaturation map of polyoma virus DNA (166) 242
Bourguignon, M-F. and Bourgaux, P.
Electron microscopic study of the tertiary structure of covalently closed polyoma virus DNA (169) 476
Bourrillon, R. et Font, J.
Purification et propiétés physicochimiques d'une phytohémagglutinine de Robinia pseudoaccacia. Isolement d'un glycopeptide actif (154) 28
Bourrillon, R., Razafimahaleo, E. et Parnaudeau, M. A.
Etude sur la structure de l'α_2-macroglobuline humaine (α_2M). II. Préparation et propiétés des glycopeptides isolés d'un hydro lysat enzymatique d' α_2M (154) 405
Bourrillon, R., see Razafimahaleo, E. (154) 397
Bowden, J. K., Chapman, J. A. and Wynn, C. H.
Precipitation of collagen in the segmented long-spacing form by various organic and inorganic compounds (154) 190
Bowden, J. P.
A method for preparing small quantities of ^{14}C-labeled staphylococcal enterotoxin B (168) 150
Bowen, D. M. and Radin, N. S.
Purification of cerebroside galactosidase from rat brain (152) 587
Bowen, D. M. and Radin, N. S.
Properties of cerebroside galactosidase (152) 599
Bowes, J. H. and Cater, C. W.
The interaction of aldehydes with collagen (168) 341
Bowes, J. H. and Cater, C. W.
The formol titration for the determination of ε-amino groups substituted in modified collagens (168) 353
Bowness, J. M. and Tan, Y. H.
Chromatographic distinction between hyaluronidases from human serum and ovine testes, (151) 288
Boyadjiev, S. I. and Hadjiolov, A. A.
Fractionation and biosynthesis of ribonucleic acids of the rat adrenals (161) 341
Boyd, C. A. R., Parsons, D. S. and Thomas, A. V.
The presence of K^+-dependent phosphatase in intestinal epithelial cell brush borders isolated by a new method (150) 723
Boyd, G. S. and Eastwood, M. A.
Studies on the quantitative distribution of bile salts along the rat small intestine under varying dietary regimes (152) 159
Boyse, E. A., see Kim, J. H. (158) 476
Bradford, R. H. and Furman, R. H.
Plasma post-heparin lipolytic activity in hyperchylomicronemia (fat-induced lipemia) (164) 172
Bradley, A., see Glitz, D. G. (161) 1
Bradley, J., see Williams, E. J. (150) 626
Brady, R. O., see Weinreb, N. J. (159) 141
Brakier, L., see Verly, W. G. (161) 548
Brammer, K.W., Jones, A.S., Mian, A.M. and Wal-

ker, R.T.
Study of the use of alkaline degradation derivatives as procedure for the determination of nucleotide distribution (166) 732
Brandt, I. K., Simmons, P. and Gutfinger, T.
Rat liver glycine acyltransferase: Partial purification and some properties (167) 196
Braswell, E.
Heparin: Molecular weight and degradation studies (158) 103
Braun, C. B., see Hurwitz, C. (157) 392
Braun, S. R., see Ciccone, J. R. (163) 108
Braunstein, E. A., see Tikhonenko, A. S. (167) 476
Bray, R. C., see Gibson, J. F. (153) 721
Bremer, H. and Yuan, D.
Uridine transport and incorporation into nucleic acids in Escherichia coli (169) 21
Bremer, J., see Aas, M. (164) 157
Bremer, J., see Bøhmer, Th. (152) 440
Bremer, J., see Bøhmer, Th. (152) 559
Brenner, R. R., see Chiappe de Cingolani, G. E. (152) 217
Brenner, R. R., see Nervi, A. M. (152) 539
Bresler, S., Grajevskaja, R., Kirilov, S. and Saminski, E.
Stability of peptidyl-tRNA. The intermediate of protein synthesis (155) 465
Bretthauer, R. K. and Golichowski, A. M.
Adsorption chromatography of phenylalanine peptides on Sephadex (155) 549
Breuer, H., see Dahm, K. (159) 377
Brewer, J.M., Spencer, T.E. and Ashworth, R.B.
Zinc effect on physical properties of bovine carbonic anhydrase (168) 359
Brierley, G. P., Fleischman, D., Hughes, S. D., Hunter, G. R. and McConnell, D. G.
On the permeability of isolated bovine retinal outer segment fragments (163) 117
Brierley, G.P., see Settlemire, C.T. (162) 487
Bright, H. J., see Kivirikko, K. I. (151) 558
Brill, A. S., Bryce, G. F. and Maria, H. J.
Optical and magnetic properties of Pseudomonas azurins (154) 342
Brimacombe, R. L. C. and Kirby, K. S.
RNA-DNA hybrids formed by ribosomal RNA from a rat hepatoma (157) 362
Brimhall, B., see Jones, R. T. (154) 278
Brimhall, B., see Jones, R. T. (154) 488
Briskey, E., see Seraydarian, K. (162) 424
Britten, J. S. and Blank, M.
Thallium activation of the (Na+-K+)-activated ATPase of rabbit kidney (159) 160
Broady, K., see Steven, F. S. (160) 435
Brockerhoff, H.
Substrate specificity of pancreatic lipase (159) 296
Brodbeck, U., see Tanahashi, N. (154) 247
Brodie, H. J., Possanza, G. and Townsley, J. D.
Studies on the mechanism of estrogen biosynthesis. V. Stereochemical comparison of aromatization in placental and microbiological systems (152) 770
Brody, M., see Broyde, S. B. (153) 183
Brody, S. S., see Broyde, S. B. (153) 183
Broekhuyse, R. M.
Phospholipids in tissue of the eye. I. Isolation, characterization and quantitative analysis by two-dimensional thin-layer chromatography of diacyl and vinyl ether phospholipids (152) 307
Broekhuyse, R. M.
Changes in myo-inositol permeability in the lens due to cataractous conditions (163) 269
Broekhuyse, R. M. and Veerkamp, J. H.
Phospholipids in the tissues of the eye. II. Composition and incorporation of $^{32}P_i$ of phospholipids of normal rat and calf lens (152) 316
Broker, T. R., see Firshein, W. (166) 261
Broker, T. R., see Ghosh, A. K. (162) 402
Bron, C. et Isliker, A.
Etude électrophorétique de la dénaturation de transferrine humaine par l'urée (154) 61
Brookes, K. B., see Stanacev, N. Z. (152) 806
Brookes, P., see Lawley, P. D. (157) 646
Brookes, P., see Venitt, S. (155) 521
Brooks, F. P., see London, C. D. (150) 509
Broughton, W. J.
Influence of gibberellic acid on nucleic acid synthesis in dwarf pea internodes (155) 308
Brown, D.G., Baron, C. and Abrams, A.
The separation of the ribosomal proteins of Streptococcus fecalis by isoelectric focusing, amino acid composition of the total ribosomal proteins and of an acidic fraction (168) 386
Brown, D. H.
Separation of mitochondria, peroxisomes and lysosomes by zonal centrifugation in a Ficoll gradient (162) 152
Brown, H. D., see Pennington, S. N. (167) 479
Brown, J. N. and Dodgen, C. L.
Fish liver tryptophan pyrrolase: The apparent absence of both hormonal regulation and substrate induction (165) 463
Brown, J. P.
Polarographic comparison of some microbial catalases in vivo (165) 174
Brown, J. S.
Chlorophyll absorption and fluorescence in Ochromonas danica (153) 901
Brown, J. S. and Michel-Wolwertz, M. R.
Chlorophyll fluorescence near 720 mμ in Euglena extracts (153) 288
Brown, L. R., see Tischer, R. G. (156) 403
Brown, R. R., see Rose, D. P. (163) 93
Brown, W. J., see Verity, M. A. (151) 284
Broyde, S. B., Brody, S. S. and Brody, M.
Absorption difference spectroscopy of chlorophyll a in ethanol solution (153) 183
Bruce, R. M., Ragheb, H. S. and Weiner, H.
Biosynthesis of streptomycin: Origin of streptidine from D-glucose (158) 499
Brummelová, V., see Franěk, F. (160) 321
Brunel, C., see Cantau, B., (167) 511
Brunori, M., Amiconi, G., Antonini, E., Wyman, J., Zito, R. and Rossi Fanelli, A.
The transition between "acid and alkaline" ferric heme proteins (154) 315
Bryce, G. F., see Brill, A. S. (154) 342
Bryla, J. and Kaniuga, Z.
On the binding of antimycin to the respiratory chain (153) 910
Bryla, J., see Kaniuga, Z. (153) 60
Buchanan, B.B. and Bachofen, R.
Ferredoxin-dependent reduction of nicotinamide-adenine dinucleotides with hydrogen gas by subcellular preparations from the photosynthetic bacterium, Chromatium (162) 607
Buchko, M.K., see Rothblat, G.H. (164) 327
Bucolo, G., see Bartlett, G. R. (156) 240
Budowsky, E.I., Simukova, N.A. and Guskova, L.I.
The extent and specificity of the degradation of polynucleotide chain under the conditions of the preparation of deuridylic

RNA (166) 755

Buetow, D.E., see Schuit, K.E. (166) 702

Burger, M. M., see Ohta, N. (158) 98

Burka, E.R.

The distribution of RNA and ribosomes in reticulocytes (166) 672

Burlet, M.J., see Rous, S. (152) 462

Burr, A. and Mauzerall, D.

The oxygen luminometer. An apparatus to determine small amounts of oxygen, and application to photosynthesis (153) 614

Burstein, Y., Fridkin, M. and Shinitzky, M.

Detection of aromatic amino acid derivatives on thin-layer chromatograms by various electron acceptors (160) 141

Burton, P. M. and Waley, S. G.

Kinetics of triose phosphate isomerase (151) 714

Busch, E. W., Von Borcke, I. M. und Martinez, B.

Abbauwege und Abbaumuster der Purinnucleotide in Herz-, Leber- und Nierengewebe von Kaninchen nach Kreislaufstillstand (166) 547

Busch, H., see Prestayko, A.W. (169) 327

Bushnell, D. E., see Whittle, E. D. (161) 41

Busiello, E., see Di Girolamo, M. (169) 387

Buslig, B.S., see Attaway, J.A. (164) 609

Butcher, F. R. and Serif, G. S.

Hormonal control of thyroid phosphorylase (156) 59

Butler, W. L., see Cramer, W. A. (153) 889

Butzow, J.J.

Probe of subunit structure in fungal p-diphenol oxidase by treatment with guanidine hydrochloride and at high pH (168) 490

Butzow, J. J. and Eichhorn, G. L.

Physical chemical studies on the age change in rat tail tendon collagen (154) 208

Byers, B. R. and Lankford, C. E.

Regulation of synthesis of 2,3-dihydroxybenzoic acid in Bacillus subtilis by iron and a biological secondary hydroxamate (165) 563

Byvoet, P.

Differences in turnover between histones and their acetyl N-terminal groups (160) 217

C

Caffery, J.M., Whichard, L. and Irvin, J. L.
Induction of hepatic tryptophan pyrrolase and tyrosine transaminase by histones and other polypeptides (157) 616
Cahill, C.L. and Li, S.C.
Terminal amino acid residues of ovine follicle stimulating hormone (168) 367
Cahill, C. L., Shetlar, M. R., Payne, R. W., Endecott, B. and Li, Y.-T.
Isolation and characterization of ovine follicle stimulating hormone (154) 40
Caldarera, C. M., Barbiroli, B., Moruzzi, M. S. and Marchetti, M.
Studies on the effect of orotic acid on nucleic acid metabolism in vitamin B_{12}-deficient chick liver (161) 156
Caldarera, C. M., see Pasquali, P. (158) 482
Caldwell, B.V., see Péron, F.G. (164) 396
Calissano, P. and Angeletti, P. U.
Testosterone effect on the synthetic rate of two esteropeptidases in the mouse submaxillar gland (156) 51
Callegarina, C. and Cucchi, C.
Intraspecific polymorphism of hemoglobin in Tinca tinca (160) 264
Cama, H.R., see Lakshmanan, M.R. (170) 392
Cama, H.R., see Perumal, A.S. (170) 399
Camargo, A. C. M., see Migliorini, R. H. (158) 160
Camejo, G., see Villegas, R. (163) 421
Cameron, H.J. and Julian, G.R.
The effect of chloramphenicol on the polysome formation of starved stringent Escherichia coli (169) 373
Cammarano, P., Chinali, G., Gaetani, S. and Spadoni, M. A.
Involvement of adrenal steroids in the changes of polysome organization during feeding of unbalanced amino acid diets (155) 302
Cammarano, P., see Di Girolamo, M. (168) 181
Campbell, H. A., see Kim, J. H. (158) 476
Campbell, J. W., see Reddy, S. R. R. (159) 557
Campbell, R., see Goldberg, D.M. (167) 613
Candia, O. A. and Askew, W. A.
Active sodium transport in the isolated bullfrog cornea (163) 262
Cantau, B., Brunel, C. et Pudles, J.
Étude de la fraction oxydante de la glycéraldéhyde-3-phosphate déshydrogénase obtenue par hydrolyse chymotrypsique (167) 511
Cantoni, J., see Rouvière, J. (166) 94
Carestia, C., see Augusti-Tocco, G. (155) 8
Carminatti, H., see Jiménez de Asúa, L. (170) 254
Carpenter, M. P., see Oshima, M. (152) 479
Carpy, S.
Inhibition de l'anhydrase carbonique érythrocytaire bovine B par différents agents chélateurs à pH 7.4 (151) 245
Carr, C. W., see Chang, K. Y. (157) 127
Carr, H. S., see Rosenkranz, H. S. (161) 428
Carrara, M. and Bernardi, G.
Separation of nucleosides on polyacrylamide gel columns (155) 1
Carraway, K. L. and Koshland, Jr., D. E.
Reaction of tyrosine residues in proteins with carbodiimide reagents (160) 272
Carrell, R. W. and Irvine, D.
Characterization of the α chain core of human haemoglobin variants (154) 78
Carrier, W. L., see Whitson, G. L. (161) 285
Carstensen, E. L., Fuhrmann, G. F., Smearing, R. W. and Klein, L. A.
The influence of conductivity on the electrophoretic mobility of red blood cells (156) 394
Carter, B.J. and Smith, M.G.
Sedimentation of DNA from bacteriophage λ-infected Escherichia coli (166) 735
Carter, W. A. and Levy, H. B.
The recognition of viral RNA by mammalian ribosomes. An effect of interferon (155) 437
Carubelli, R. and Griffin, M.J.
On the presence of N-glycolylneuraminic acid in HeLa cells (170) 446
Caspary, W.F. and Crane, R.K.
Inclusion of L-glucose within the specificity limits of the active sugar transport system of hamster small intestine (163) 395
Cassim, J.Y., Tobias, P.S. and Taylor, E.W.
Birefringence of muscle proteins and the problem of structural birefringence (168) 463
Cassoly, R.
Préparation d'un nouveau composé hémoglobinique partiellement saturé par l'hème: Semi-hémoglobine β (168) 370
Castañeda, M. and Tyler, A.
The lability of in vitro amino acid-incorporating systems of sea urchin eggs in relation to nuclease release and other factors (166) 741
Catalina, L., see Paneque, A. (162) 149
Cater, C.W., see Bowes, J.H. (168) 341
Cater, C.W., see Bowes, J.H. (168) 353
Catlin, E. R., Hassall, C. H. and Pratt, B. C.
Biosynthesis of phenols. XV. Isolation of some shikimic acid-derived metabolites from mutant strains of Streptomyces rimosus unable to produce oxytetracycline (156) 109
Catsimpoolas, N., Ekenstam, C., Rogers, D. A. and Meyer, E. W.
Protein subunits in dormant and germinating soybean seeds (168) 122
Cattan, D. and Bourgoin, D.
Interactions between DNA and hen's egg white lysozyme: Effects of composition and structural changes of DNA, ionic strength and temperature (161) 56
Cavalieri, L.F. and Nemchin, R.G.
The binding of actinomycin D and F to bacterial DNA (166) 722
Caygill, J.C.
Lysis of glycosides in the presence of L-ascorbic acid (170) 1
Ceccarini, C. and Maggio, R.
Studies on the ribosomes from the cellular slime molds, Dictyostelium discoideum and Dictyostelium purpureum (166) 134
Čejka, J., Vodrážka, Z. and Salák, J.
Carbamylation of globin in electrophoresis and chromatography in the presence of urea (154) 589
Center, M. S. and Behal, F. J.

Studies on the ribonuclease activity of Proteus mirabilis (151) 698

Černá, J. and Rychlik, I.
Cross resistance of Escherichia coli B ribosomes to inhibition of the puromycin reaction by erythromycin, spiramycin and chloramphenicol (157) 436

Černý, R. Mushynski, W.E. and Spencer, J.H.
Nucleotide clusters in deoxyribonucleic acids. III. Separation of pyrimidine isostichs according to base composition (169) 439

Chabaud, O., see Cheftel, C. (170) 29

Chacko, G.K. and Hanrahan, D.J.
Chemical synthesis of 1-O-(D)- and 3-O-(L)-glyceryl monoethers, diethers and derivatives: Glycerides, monoester phospholipids and diether phospholipids (164) 252

Chaikoff, I. L., see Ewald, W. (167) 444
Chaix, P., see Labbe, P. (159) 527
Chaix, P., see Ohaniance, L. (170) 435
Chalkley, R., see Bartley, J. A. (160) 224
Chalkley, R., see Panyim, S. (160) 252
Chamberlain, C., see Vegh, K. (163) 266

Chambon, P., Karon, H., Ramuz, M. and Mandel, P.
The influence of ionic strength and a polyanion on transcription in vitro. II. Effects on the template efficiency of rat liver chromatin for a purified bacterial RNA polymerase (157) 520

Chambon, P., Ramuz, M., Mandel, P. and Doly, J.
The influence of ionic strength and a polyanion transcription in vitro. I. Stimulation of the aggregate RNA polymerase from rat liver nuclei, (157) 504

Chandler, A. M. and Neuhaus, O. W.
Injury and plasma protein biosynthesis. I. Hepatic nucleic acid metabolism (166) 186

Chandler, J. L. R., see Saxton (156) 77
Chang, C.C., see Yang, C.C. (168) 373

Chang, K. Y. and Carr, C. W.
The binding of calcium with DNA and DNA-protein complexes (157) 127

Chantrenne, H., see Grosjean, H. (166) 616

Chapman, D., Fluck, D. J., Penkett, S. A. and Shipley, G. G.
Physical studies of phospholipids. X. The effect of sonication on aqueous dispersions of egg yolk lecithin (163) 255

Chapman, D., see Barratt, M. D. (152) 20
Chapman, D., see Kamat, V.B. (163) 411
Chapman, D., see Ladbrooke, B.D. (150) 333
Chapman, D., see Ladbrooke, B. D. (164) 101
Chapman, D., see Phillips, M.C. (163) 301
Chapman, D., see Salsbury, N.J. (163) 314

Chapman, D.J., Cole, W.J. and Siegelman, H.W.
Cleavage of phycocyanobilin from C-phycocyanin (153) 692

Chapman, J. A., see Bowden, J. K. (154) 190
Chargaff, E., see Morisawa, S. (169) 285
Charlemagne, D., see Jollès, P. (151) 532
Charles, C., see Mazza, G. (167) 89
Charles, R., see Graafmans, W. D. J. (153) 916
Chasen, B., see Balcavage, W.X. (162) 525
Chattoraj, D. K., see Upadhyay, S. N. (161) 561
Chauvet, J., see Acher, R. (154) 255
Chauvet, M. T., see Acher, R. (154) 255

Cheah, K.S.
The respiratory components of Moniezia expansa (153) 718

Cheatum, S.G., see Warren, J. C. (159) 540
Cheeseman, G. C., see Jarvis, B. (168) 153

Cheftel, C. and Bouchilloux, S.
Glycoprotein biosynthesis in sheep thyroid slices incubated with radioactive glucosamine and leucine. I. Polysomes, microsomes and postmicrosomal fraction (170) 15

Cheftel, C., Bouchilloux, S. and Chabaud, O.
Glycoprotein biosynthesis in sheep thyroid slices incubated with radioactive glucosamine and leucine. II. A study of microsomal subfractions (170) 29

Chen, C. and Lin, C.C.
Mechanism of aliphatic hydroxylation: Tetralin hydroperoxide as an intermediate in the hydroxylation of tetralin in rat-liver homogenate (170) 366

Chen, S. Y., see Collipp, P. J. (167) 141

Cheng, H. F., Peterson, R. E. and Evans, T. C.
Preparation of highly purified human thyroglobulin (168) 161

Cheniae, G. M. and Martin, I. F.
Site of manganese function in photosynthesis (153) 819

Chenoweth, M., see Dunn, A. (165) 170
Cheong, K., see DasGupta, B.R. (168) 522
Cherry, J. H., see Ewing, E. E. (161) 331
Cherry, J. H., see Jachymczyk, W. J. (157) 368
Cherry, J.H., see O'Brien, T.J. (169) 35
Chetsanga, C. J., see Stackhouse, H. L. (155) 159

Cheung, G.P., Cotropia, J.P. and Sallach, H.J.
Comparative studies of enzymes related to serine metabolism in fetal and adult liver (170) 334

Chevallier, F., Hollander, F.D. et Simonnet, F.
Renouvellement, par synthèse et par transfert, du cholestérol libre et esterifié. Grandeur des compartiments chez le rat adulte et leur répartition tissulaire (164) 339

Chevallier, J., see Béchet, J.J. (151) 165

Chiappe de Cingolani, G. E. and Brenner, R. R.
Effect of diabetes on glucose metabolism in isolated fat cells (152) 217

Chiari, D. F.
D-Aminosäure-oxydase in Fusarium (165) 127

Chignell, C. F. and Titus, E.
The effect of hydroxylamine and N-methylhydroxylamine on beef brain microsomal $(Na^+ + K^+)$-ATPase (159) 345

Chin, H. P.
The sphingomyelin content of human serum: A genetic study (152) 346

Chinali, G., see Cammarano, P. (155) 302
Ching-Hsien Han, S., see Rosenthal, A. F. (152) 96
Chiou, C. Y., see Rama Sastry, B. V. (167) 339
Chivvis, A.B., see Corwin, A.H. (162) 533
Chmielewicz, Z. F., see Troll, W. (157) 16
Cho, S., see Sugano, M. (152) 781

Christ, E. J. V. J.
Fatty acid synthesis in mitochondria. Elongation of short-chain fatty acids and formation of unsaturated long-chain fatty acids (152) 50

Christensen, H. N.
Histidine transport into isolated animal cells (165) 251

Christensen, H. N. and Cullen, A. M.
Effect of non-metabolizable analogs on the distribution of amino acids in the rat (150) 237

Christiansen, K., see Marcel, Y. L. (164) 25
Christinzio, M., see Paik, W. K. (167) 209
Christophe, J., see Vandermeers, A. (154) 110
Christophe, J., see Vandermeers, A. (158) 448
Christophe, J., see Winand, J. (152) 280
Christophersen, B. O.

Formation of monohydroxy-polyenic fatty acids from lipid peroxides by a glutathione peroxidase (164) 35
Chu, M. Y., see Momparler, R. L. (161) 481
Chung, A. E.
Nicotinamide-adenine dinucleotide kinase from Azotobacter vinelandii cells. Reversible inactivation of the enzyme (159) 490
Chung, D., see Li, C. H. (160) 472
Churchich, J. E., see Farrelly, A. G. (167) 280
Ciccone, J. R., Keller, A. I., Braun, S. R., Murdaugh, H. V. and Preuss, H. G.
Azotemic inhibition of organic acid transport in the liver (163) 108
Ciferri, O., see Perani, A. (161) 223
Cifonelli, J. A. and Rodén, L.
The isolation of heparin and heparitin sulfate from hog skin (165) 553
Čihák, A., Veselá, H. and Šorm, F.
Thymidine kinase and polyribosome distribution in regenerating rat liver following 5-azacytidine (166) 277
Ciman, M. and Siliprandi, N.
On the oxidation of α-oxobutyrate by isolated mammalian mitochondria (162) 164
Citri, N., see Zyk, N. (151) 306
Citri, N., see Zyk, N. (159) 317
Citri, N., see Zyk, N. (159) 327
Clamp, J.R., see Bhatti, T. (170) 206
Clark, C. C. and Veis, A.
A high-resolution acrylamide-gel electrophoresis technique for the analysis of collagen polymer components (154) 175
Clarke, C.B., see Baldwin, B.C. (162) 614
Clarke, L.P., see Freundlich, M. (170) 271
Clark-Walker, G. D., see Lamb, A. J. (161) 415
Clausen, J. and Hustrulid, R.
Factors affecting recombination of lactate dehydrogenase isoenzyme subunits (167) 221
Clausen, T.
The relationship between the transport of glucose and cations across cell membranes in isolated tissues. III. Effect of Na^+ and hyperosmolarity on glucose metabolism and insulin responsiveness in isolated rat hemidiaphragm (150) 56
Clausen, T.
The relationship between the transport of glucose and cations across cell membranes in isolated tissues. IV. The "insulin-like" effect of Li^+ (150) 66
Clavert, J., see Beck, G. (169) 248
Cleary, E. G., see Sandberg, L. B. (154) 411
Cleaver, J. E. and Painter, R. B.
Evidence for repair replication of HeLa cell DNA damaged by ultraviolet light (161) 552
Cleland, S. V. and Coe, E. L.
Activities of glycolytic enzymes during the early stages of differentiation in the cellular slime mold Dictyostelium discoideum (156) 44
Cleland, W. W., see Zahler, W. L. (164) 1
Clément, G., see Paris, R. (152) 63
Clément, J., see Boucrot, P. (164) 558
Clément-Metral, J. et Yon, J.
Étude de l'inhibition de la protéolyse trypsique de la β-lactoglobuline A par le saccharose et quelques autres sucres. Mise en évidence d'un changement de conformation de la β-lactoglobuline A par liaison avec le saccharose (160) 340
Clezy, P. S., see Nichol, A. W. (156) 97
Cockburn, W., see Baldry, C. W. (153) 476
Coe, E. L.
Stimulation of ascites tumor cell respiration by low concentrations of 2-deoxyglucose (162) 470
Coe, E. L., see Cleland, S. V. (156) 44
Coggiola, E. L., see Nichols, A. V. (168) 87
Cohen, J. A., see Veldhuisen, G. (161) 94
Cohen, J. A., see Veldhuisen, G. (161) 109
Cohen, J. A., see Veldhuisen, G. (161) 115
Cohen, P. P., see Kim, K. - H. (166) 574
Cohen, S. and Stastny, M.
Epidermal growth factor. III. The stimulation of polysome formation in chick embryo epidermis (166) 427
Cohen, S. N., see Weber, W. W. (151) 276
Cohn, D. V., see Hamilton, J. W. (155) 311
Cohn, M. L., Wang, L., Scouten, W. and McManus, I. R.
Intramitochondrial distribution of multiple forms of pig heart lipoamide dehydrogenase (159) 182
Colby, Jr., C. and Hu, A. S. L.
The regulation of the synthesis of β-galactosidase in Proteus mirabilis F-lac (157) 149
Colby, Jr., C. and Hu, A. S. L.
Purification and comparison of the β-galactosidase synthesized by Escherichia coli F-lac$^+$ and Proteus mirabilis F-lac$^+$ (157) 167
Colby, Jr. C., Martin, F. D. and Hu, A. S. L.
Catabolite repression of the synthesis of β-galactosidase in Proteus mirabilis F-lac (157) 159
Coldman, M. F. and Good, W.
The kinetics of malonamide-induced haemolysis of mammalian erythrocytes. I. The Arrhenius activation parameters (150) 194
Coldman, M.F. and Good, W.
The kinetics of malonamide-induced haemolysis of mammalian erythrocytes. II. The Eyring activation parameters (150) 206
Cole, J. A.
Cytochrome c_{552} and nitrite reduction in Escherichia coli (162) 356
Cole, J. A. and Wimpenny, J. W. T.
Metabolic pathways for nitrate reduction in Escherichia coli (162) 39
Cole, R. D., see Reid, B. R. (155) 593
Cole, R. D., see Stellwagen, R. H. (155) 581
Cole, W. J., see Chapman, D. J. (153) 692
Coleman, R.
Phosphatidate phosphohydrolase activity in liver cell surface membranes (163) 111
Coleman, R., see Thompson, J. E. (150) 405
Coleman, R. L.
Separation of α-galactosidase from rat uterus (159) 192
Coleman, R. L. and Bever, A. T.
Purification and properties of dichlorophenol-stimulated NADH oxidase from rat uterus (151) 267
Collier, R. H., see Sachs, G. (162) 210
Collin, M.V., see Mizuno, N.S. (166) 656
Collins, C. J. and Guild, W. R.
Irreversible effects of formaldehyde on DNA (157) 107
Collins, F. D., see Sinclair, A. J. (152) 498
Collipp, P. J., Chen, S. Y. and Halle, M.
Human liver glucose-6-phosphatase: Characteristics of the detergent-solubilized enzyme (167) 141
Colobert, L., see Got, R. (157) 599
Colobert, L., see Louisot, P. (155) 38

Colvill, A. J. E. and Terzi, M.
  Polyriboadenylate polymerase and its inhibition in T_4-infected Escherichia coli and Shigella dysenteriae (155) 394
Common, R. H., see Tang, G. (158) 402
Commoner, B., see Woolum, J. C. (160) 311
Comorosan, S., Gaspar, A. and Sandru, D.
  Isolation and characterization of a rapidly labelled RNA from mouse liver mitochondria (166) 394
Condrea, E. and Rosenberg, P.
  Demonstration of phospholipid splitting as the factor responsible for increased permeability and block of axonal conduction induced by snake venom. II. Study on squid axons (150) 271
Conlay, C., see Pradel, L.-A. (154) 305
Conn, E.E., see Russel, D.W. (170) 210
Connamacher, R. H. and Mandel, H. G.
  Studies on the intracellular localization of tetracycline in bacteria (166) 475
Constantino, E., see D'Amelio, V. (155) 614
Conway, G., see Vierling, J. (160) 53
Cook, E. A., see Hastings, J. R. B. (155) 603
Coolsma, J.W.Th. and Gruber, M.
  RNA synthesis in rooster liver (169) 306
Cooper, J. R.
  The role of thiamine in nervous tissue: The mechanism of action of pyrithiamine (156) 368
Cooper, J. R., see Itokawa, Y. (158) 180
Cooper, W.K., Muramatsu, K. and Wannemacher, Jr., R.W.
  An in vitro amino acid incorporating system for liver, brain and skeletal muscle ribosomes (169) 269
Cooper Bell, Jr., C., see Swell, L. (164) 278
Coratelli, P., see Quagliariello, E. (164) 12
Corcoran, J. W., see Oleinick, N. L. (155) 290
Corcoran, J. W., see Wilhelm, J. M. (166) 268
Cornatzer, W.E., see Baldwin, J.J. (164) 195
Cornatzer, W. E., see Rytter, D. (152) 418
Cornell, N. W. and Villee, C. A.
  Purification and properties of rat liver histidase (167) 172
Corneo, G., see Giacomoni, D. (166) 586
Correll, D. L., Edwards, J. L., Klein, W. H. and Shropshire, Jr., W.
  Phytochrome in etiolated annual rye. III. Isolation of photoreversible phytochrome (168) 36
Correll, D. L., Steers, Jr., E., Towe, K. M. and Shropshire, Jr., W.
  Phytochrome in etiolated annual rye. IV. Physical and chemical characterization of phytochrome (168) 46
Corsi, A., see Mühlrad, A. (162) 435
Cortner, J. A., see Schnatz, J. D. (167) 367
Corwin, A. H., Arellano, R. R. and Chivvis, A. B.
  Anomalies of viologens in bases and water (162) 533
Coster, H. G. L. and Simons, R.
  Energy of formation of bimolecular lipid membranes (163) 234
Cotlier, E, Kwan, B. and Beaty, C.
  The lens as an osmometer and the effects of medium osmolarity on water transport, ^{86}Rb efflux and ^{86}Rb transport by the lens (150) 705
Cotman, C., Mahler, H. R. and Anderson, N. G.
  Isolation of a membrane fraction enriched in nerve-end membranes from rat brain by zonal centrifugation (163) 272
Cotropia, J.P., see Cheung, G.P. (170) 334
Cotton, R. G. H. and Gibson, F.
  The biosynthesis of phenylalanine and tyrosine in the pea (Pisum sativum): Chorismate mutase (156) 187
Cotton, R. G. H. and Gibson, F.
  The biosynthesis of tyrosine in Aerobacter aerogenes: Evidence for a subunit structure of the protein converting chorismate into 4-hydroxyphenyl pyruvate (160) 188
Coulson, W. F., Henson, G. and Jepson, J. B.
  The production of m-tyramine from L-phenylalanine by rat liver preparations (156) 135
Coulson, W. F. and Linker, A.
  Cardiovascular studies on copper-deficient swine. XI. Mucopolysaccharides and the mechanical properties of the aorta (158) 117
Coulson, W. F., Wardle, E. and Jepson, J. B.
  Phenylalanine hydroxylase activity towards two substrates simultaneously: Enhancement or inhibition by phenylalanine, tryptophan and their derivatives (167) 99
Coward, J. E., Morse, Jr., P. A. and Gentry, G. A.
  Effect of methotrexate on pyrimidine metabolism in regenerating rat liver (155) 605
Cowgill, R.W.
  Fluorescence and protein structure. XIV. Tyrosine fluorescence in helical muscle proteins (168) 417
Cowgill, R.W.
  Fluorescence and protein structure. XV. Tryptophan fluorescence in a helical muscle protein (168) 431
Cowgill, R.W.
  Fluorescence and protein structure. XVI. Detergents bound to muscle proteins (168) 439
Cowgill, R. W., see Russell, E. G. (154) 231
Cowling, E. B., see Kirk, T. K. (165) 134
Cowling, E. B., see Kirk, T. K. (165) 145
Cox, D. P. and Hanson, R. S.
  Catabolite repression of aconitate hydratase in Bacillus subtilis (158) 36
Cox, G. B., Snoswell, A. M. and Gibson, F.
  The use of a ubiquinone-deficient mutant in the study of malate oxidation in Escherichia coli (153) 1
Cox, G. B., see Snoswell, A. M. (162) 455
Cox, N., Turner, J.M. and Willetts, A.J.
  Aminopropanol dehydrogenase activity in rat-liver preparations (170) 438
Coyle, R. P., see Walter, H. (156) 409
Coyle, R. P., see Walter, H. (165) 540
Cozcolluela, C. and Subirana, J. A.
  Somatic histones from Mytilus edulis (154) 242
Crabbé, J., see De Weer, P. (155) 280
Crabbé, J., see Rousseau, G. (157) 25
Craddock, V. M., see Lawley, P. D. (157) 646
Craig, N.C., see Liau, M.C. (169) 196
Cram, W.J.
  Compartmentation and exchange of chloride in carrot root tissue (163) 339
Cramer, W. A. and Butler, W. L.
  Further resolution of chlorophyll pigments in photosystems 1 and 2 of spinach chloroplasts by low-temperature derivative spectroscopy (153) 889
Crane, F.L., see Stiles, J.W. (162) 631
Crane, F. L., see Sun, F. F. (153) 804
Crane, R.K., see Caspary, W.F. (163) 395
Crane, R. K., see Malathi, P. (163) 275
Crawhall, J. C. and Segal, S.
  Transport of some amino acids and sugars in rat-liver slices (163) 163

Crewther, W.G., see McQuade, A.B.(167) 619
Cribbs, R. M., see Molinary, S. V.(158) 177
Crocken, B. and Tatum, E. L.
The effect of sorbose on metabolism and morphology of Neurospora(156) 1
Crocker, T. T., see Holoubek, V.(157) 352
Crombag, F. J. L., see Demel, R. A.(150) 1
Cronan, Jr., J.E., see Hutchison, H.T.(164) 606
Cronholm, T. and Sjövall, J.
Effect of ethanol on the concentrations of solvolyzable plasma steroids(152) 233
Crow, M. J. A., see Rothfus, J. A.(160) 404
Csaba, B., see Muszbek, L.(167) 464
Csaba, B., see Sümegi, J.(159) 545
Cuatrecasas, P., Fuchs, S. and Anfinsen, C. B.
The effect of a competitive inhibitor on the acetylation of tyrosyl and lysyl residues of staphylococcal nuclease(159) 417
Cucchi, C., see Callegarini, C.(160) 264
Cullen, A. M., see Christensen, H. N.(150) 237
Cumings, J. N., see Poulos, A.(152) 629
Cummins, D. L., Gitzelmann, R., Lindenmann, J. and Semenza, G.
Immunochemical study of isolated human and rabbit intestinal sucrase(160) 396
Cunningham, E. B.
The enhancement of phosphoryl transfer by adenosine 3',5'-monophosphate in the presence of a membranous fraction from canine kidney(165) 574
Cunningham, L.W., see Jirousek, L.(170) 160
Curry, W. M., see Swanson, R. F.(159) 390
Cusanovich, M. A., Bartsch, R. G. and Kamen, M. D.
Light-induced electron transport in Chromatium Strain D. II. Light-induced absorbance changes in Chromatium chromatophores(153) 397
Cusanovich, M. A. and Kamen, M. D.
Light-induced electron transport in Chromatium Strain D. I. Isolation and characterization of Chromatium chromatophores (153) 376
Cusanovich, M. A. and Kamen, M. D.
Light-induced electron transfer in Chromatium Strain D. III. Photophosphorylation by Chromatium chromatophores (153) 418
Cusanovich, M. A., see Meyer, T. E.(153) 854

D

D'Adamo, Jr., A. F., see Benuck, M. (152) 611
Daemen, F.J.M. and Bonting, S.L.
Biochemical aspects of the visual process. III. Specificity of the retinaldehyde effect on cation movements in rod outer segments (163) 212
Daemen, F. J. M., see De Pont, J. J. H. H. M. (163) 204
Dagley, S. and Geary, P. J.
The time sequence of interactions of a dioxygenase with its substrates (167) 459
Dahm, K., Lindlau, M. und Breuer, H.
Steroidepimerase-ein neues Enzym des Oestrogenstoffwechsels (159) 377
Daikuhara, Y., Tsunemi, T. and Takeda, Y.
The role of ATP citrate lyase in the transfer of acetyl groups in rat liver (158) 51
Dalgarno, L. and Gros, F.
Completion of ribosomal particles in Escherichia coli during inhibition of protein synthesis (157) 52
Dalgarno, L. and Gros, F.
RNA synthesis in "relaxed" and "stringent" Escherichia coli. Breakdown of preformed ribonucleoprotein particles and subsequent RNA synthesis (157) 64
Dallner, G., see Jakobsson, S. V. (165) 380
Dalton, B.P., see Hochstein, L.I. (167) 638
Daly, J., see Axelrod, J. (159) 472
D'Amelio, V. and Constantino, E.
The globins and their synthesis in the erythroid cells of the chick embryo (155) 614
Damjanovich, S., see Muszbek, L. (167) 464
Damjanovich, S., see Sümegi, J. (159) 545
Dancis, J., see Hutzler, J. (158) 62
Daniel, Jr., J.C., see Krishnan, R.S. (168) 579
Daniel, V., see Grunau, J.A. (166) 728
Daniels, M.J.
Studies of the biosynthesis of polymyxin B (156) 119
Danileichenko, V. V., see Iliashenko, B. N. (161) 259
Danishefsky, I. and Deutsch, L.
Glucosamine sythesis in mast cells (151) 529
Danowski, T. S., see Nakano, M. (168) 156
Danyluk, S.S., see Blears, D. J. (154) 17
Danyluk, S.S., see Hruska, F. E. (157) 238
Danyluk, S.S., see Hruska, F. E. (161) 250
Dao, T. L., see Morreal, C. E. (169) 224
Daquo, M., see Escribano, M. J. (160) 69
Darlington, A. J. and Scazzocchio, C.
Evidence for an alternative pathway of xanthine oxidation in Aspergillus nidulans (166) 569
Darlington, A. J., see Scazzocchio, C. (166) 557
Darlix, J.-L., Sentenac, A. et Fromageot, P.
Etude du RNA synthétisé in vitro (166) 438
DasGupta, B.R., Boroff, D.A. and Cheong, K.
Cation-exchange chromatography of Clostridium botulinum type A toxin on Amberlite IRC-50 resin at pH 5.55 (168) 522
Davey, M. G. and Lüscher, E. F.
Release reactions of human platelets induced by thrombin and other agents (165) 490
Davidian, N. McC., see Penniall, R. (157) 258
Davidova, S. Y. Shapot, V. S. and Solowjeva, A. A.
Hexokinase activity and glycolytic capacity of plasma membranes of hepatomas (158) 303
Davidson, E. A., see Smith, Jr., J. G. (165) 182
Davidson, J. A., see Evans, R. J. (164) 566
Davies, H. E. F., Martin, D. G. and Sharp, G. W. G.
Differences in the physiological characteristics of bladders of toads from different geographical sources (150) 315
Davies, R. E., see Delluva, A. M. (151) 646
Davies, R. E., see Kushmerick, M. J. (153) 279
Davies, E. J.
On the nature of malonate-insensitive oxidation of pyruvate and glutamate by heart sarcosomes (162) 1
Davis, K.A. and Kreil, G.
Some characteristics of cytochrome b_5 from outer membranes of rat liver mitochondria (162) 627
Dawson, E.C., see Van Steveninck, J. (150) 47
Day, W.C., Toncic, P., Stratman, S.L., Leeman, U. and Harmon, S.R.
Isolation and properties of an extracellular protease of Trichophyton granulosum (167) 597
Dearman, H. H., see Ishizu, K. (165) 283
De Bernard, B., see Romeo, D. (159) 194
De Bernard, B., see Stagni, N. (170) 129
De Busk, A. G., see Lee, P. C. (157) 427
De Carli, L., see Perani, A. (161) 223
Decker, L., see Mathews, M. B. (156) 419
Deeney, A. O'C., see Olson, K. C. (161) 532
DeFilippi, J., see Herp, A. (158) 150
De Gier, J., Mandersloot, J. G. and Van Deenen, L. L. M.
Lipid composition and permeability of liposomes (150) 666
De Groot, L.J., see Ochi, Y. (170) 198
De Groot, N., Panet, A., Fry-Shafrir, I. and Lapidot, Y.
Modified sminoacyl-tRNA. IV. The behaviour of acyl[^{14}C]phenylalanyl-tRNA in a ribosomal system from wheat germ (161) 137
De Groot, N., see Lapidot, Y. (157) 433
Deguchi, T., Ichiyama, A., Nishizuka, Y. and Hayaishi, O.
Studies on the biosynthesis of nicotinamide-adenine dinucleotide in the brain (158) 382
De Haan, E. J. and Tager, J. M.
Evidence of a permeability barrier for α-oxoglutarate in rat liver mitochondria (153) 98
De Haas, G. H., Postema, N. M., Nieuwenhuizen, W. and Van Deenen, L. L. M.
Purification and properties of phospholipase A from porcine pancreas (159) 103
De Haas, G. H., Postema, N. M., Nieuwenhuizen, W. and Van Deenen, L. L. M.
Purification and properties of an anionic zymogen of phospholipase A from porcine pancreas (159) 118
De Haas, G. H., see Lesslauer, W. (150) 306
De Hartog, M., see Gordon, E. E. (162) 220
Dehm, P., see Nordwig, A. (160) 293
Deierkauf, F. A. and Booij, H. L.
Changes in the phosphatide pattern of yeast cells in relation to active carbohydra-

te transport (150) 214

De Issaly, I. S. M.
Cysteine biosynthesis in Pasteurella multocida. Cysteine synthase, purification and properties (151) 473

De Jong, J. W., see Hulsmann, W. C. (162) 292

Dekker, E. E. and Swain, R. R.
Formation of Dg-1-amino-2-propanol by a highly purified enzyme from Escherichia coli (158) 306

De Klerk, H., see Maroc, J. (162) 621

De Kloet, S.R., see Mayo, V.S. (169) 297

De Kok, A. and Veeger, C.
Studies on L-amino-acid oxidase. I. Effects of pH and competitive inhibitors (167) 35

De Kouchkovsky, Y., see Fork, D. C. (153) 891

Delaage, M.
Sur la recherche du poids moléculaire le plus cohérent avec l'analyse des acides aminés d'une protéine (168) 573

De la Morena, E., Santos, I. and Grisolia, S.
Homogeneous crystalline phosphoglycerate phosphomutase of high activity. A simple method for lysis of yeast (151) 526

DeLaumeny, J. M., see Vilkas, E. (158) 147

Delcambe, L., see Olomucki, A. (151) 353

De Leo, P. and Giovannozzi-Sermanni, G.
Interference of myokinase in the determination of ATP by luciferase assay (170) 208

Delius, A. E., see Franze de Fernández, M. T. (154) 223

Dellacha, J. M., Enero, M. A. and Paladini, A. C.
Physicochemical behaviour and biological activity of bovine growth hormone in acidic solution (168) 95

Delluva, A. M., Markley, K. and Davies, R. E.
The absence of gastric urease in germ-free animals (151) 646

Delman, S., see Troll, W. (157) 16

Delmer, D. P. and Mills, S. E.
Tryptophan synthase from Nicotiana tabacum (167) 431

DeMan, J. M., see Woodrow, I. L. (152) 472

Demel, R. A., Crombag, F. J. L., Van Deenen, L. L. M. and Kinsky, S. C.
Interaction of polyene antibiotics with single and mixed lipid monomolecular layers (150) 1

Demel, R. A., Kinsky, S. C., Kinsky, C. B. and Van Deenen, L. L. M.
Effects of temperature and cholesterol on the glucose permeability of liposomes prepared with natural and synthetic lecithins (150) 655

Demel, R. A., see Kinsky, S. C. (152) 174

Dénes, G., see Vincze, I. (159) 423

Denis, S.
Changes in the level of triphosphopyridine nucleotides during development of sea-urchin eggs (normal and lethal hybrids) (157) 212

De Pont, J. J. H. H. M., Daemen, F. J. M. and Bonting, S. L.
Biochemical aspects of the visual process. II. Schiff base formation in phosphatidylethanolamine monolayers upon penetration by retinaldehyde (163) 204

De Rooij-Dijk, H.H., see Penders, T.J. (168) 588

Derzhanski, Al., see Atanasov, B. P. (160) 255

Desai, I. D.
Cell preparation for the assay of threonine deaminase in Escherichia coli (167) 467

Deschamps, Y., see Verly, W. G. (161) 548

Deshmukh, K. and Nimni, M.
Soluble collagen with high aldehyde content extracted from insoluble collagen with mercaptoethylamine (154) 258

Desnuelle, P., see Benzonana, G. (164) 47

Desnuelle, P., see Entressangles, B. (159) 285

Desnuelle, P., see Palla, J. C. (158) 25

De Souza, N. J., see Raab, K. H. (152) 742

Detert, A. C., see Hamilton, J. W. (155) 311

Deuticke, B.
Transformation and restoration of biconcave shape of human erythrocytes induced by amphiphilic agents and changes of ionic environment (163) 494

Deuticke, B., see Duhm, J. (170) 452

Deutsch, K., see Matty, A. J. (163) 14

Deutsch, L., see Danishefsky, I. (151) 529

De Vijlder, J. J. M. and Slater, E. C.
The reaction between NAD⁺ and rabbit-muscle glyceraldehydephosphate dehydrogenase (167) 23

De Villiers, V., see Schabort, J. C. (151) 33

De Vries, A., see Aloof-Hirsch, S. (154) 53

De Vries, A., see Klibansky, C. (150) 15

De Wachter, R., Verhassel, J-P. and Fiers, W.
The 5'-terminal end group of the RNA of the bacteriophage MS2 (157) 195

De Weck, A. L., see Schneider, C. H. (168) 27

De Weer, P. and Crabbé, J.
The role of nucleic acids in the sodium-retaining action of aldosterone (155) 280

Diamond, J. M., see London, C. D. (150) 509

Diamond, J. M., see Wright, E. M. (163) 57

Diana, A.L., see Ting, H.P. (163) 439

Dianoux, A.-C., see Jollès, P. (151) 532

Dick, V. C., see Miyazawa, F. (155) 193

Diczfalusy, E., see Pasqualini, J. R. (152) 648

Diczfalusy, E., see Reynolds, J. W. (152) 438

Diehn, B. and Seely, G. R.
The oxidation of chlorophyll a in alcohols (153) 862

Dienstag, J., see Morreal, C.E. (169) 224

Dietz, Jr., F. W., see Fitt, P. S. (151) 99

Di Girolamo, M. and Cammarano, P.
The protein composition of ribosomes and ribosomal subunits from animal tissues. Electrophoretic studies (168) 181

Di Girolamo, M., Hinckley, E. and Busiello, E.
Localization of ribosome precursors in Escherichia coli (169) 387

Dillard, W.L. and Schweiger, H.G.
Kinetics of RNA synthesis in Acetabularia (169) 561

Dilley, R. A. and Shavit, N.
On the relationship of H⁺ transport to photophosphorylation in spinach chloroplasts (162) 86

Dils, R., see Easter, D. J. (152) 653

Dilworth, M. J., see Biggins, D. R. (156) 285

Dimick, P. S., see Walker, N. J. (152) 445

Di Sabato, G.
Reactions of DPN⁺ and pyruvate (167) 646

Dityathkin, S. J., see Iliashenko, B. N. (161) 259

Dixon, J. S., see Bewley, T. A. (154) 420

Dixon, J. S., see Li, C. H. (160) 472

Dod, B. J. and Gray, G. M.
The lipid composition of rat-liver plasma membranes (150) 397

Dodgen, C. L., see Brown, J. N. (165) 463

Doherty, M. D., see Keto, A. I. (151) 721

Dohi, Y., see Sugita, Y. (160) 291

Doi, R.H., see Bishop, H.L. (169) 278

Doizaki, W. M. and Zieve, L.
Effect of surface-active agents on post-heparin lipase activity (152) 713

Doly, J., see Chambon, P. (157) 504

Donch, J. and Greenberg, J.

Partial reactivation of irradiated phage P1 by strain Bs2 of Escherichia coli (166) 271
Dorner, R. W., Antonopoulos, C. A. and Gardell, S.
Application of cetylpyridinum-complex elution methods to analysis of glycosaminoglycans of tendon (158) 336
Doskočil, J., see Pačes, V. (161) 352
Dos Reis, L., Rosenbusch, J. and Nichols, Jr., G.
The entry of sugars into bone cells. Independence from parathyroid extract and thyrocalcitonin effects (150) 311
Doss, M.
Porphyrin- und Hämsythese bei Achromobacter metalcaligenes unter dem Einfluss von 2-Methyl-2-n-propyl-1,3-propandioldicarbamat (170) 461
Douglas, J. B., see Healy, J. K. (151) 520
Douša, T. and Rychlik, I.
The effect of parathyroid hormone on adenylcyclase in rat kidney (158) 484
Douzou, P., see Leterrier, F. (154) 444
Dowben, R. M. and Weidenmüller, R.
Adaptation of mesophilic bacteria to growth at elevated temperatures (158) 255
Dowdle, E., see Hickman, R. (161) 197
Doy, C. H.
Aromatic biosynthesis in yeast. II. Feedback inhibition and repression of 3-deoxy-D-arabino-heptulosonic acid 7-phosphate synthase (151) 293
Doy, C. H.
The nature of 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase in extracts of wild-type Neurospora crassa: A ping-pong reaction controlled by two activating substrates and three allosteric negative modifiers (159) 352
Doy, C. H. and Halsall, D. M.
The exogenous environment as a factor in the control of the 3-deoxy-D-arabino--heptulosonate 7-phosphate synthase of Neurospora crassa (167) 422
Doyle, R. J., Bello, J. and Roholt, O. A.
Probable protein crosslinking with tetranitromethane (160) 274
Dozy, A. M., see Huisman, T. H. J. (160) 467
Dozy, A.M., see Kleihauer, E.F. (154) 220
Drabikowski, W. and Nonomura, Y.
The interaction of troponin with F-actin and its abolition by tropomyosin (160) 129
Drabikowski, W., see Strzelecka-Golaszewska, H. (162) 581
Dragila, T.A., see Abbott, M.T. (169) 1
Drášil, V., Rýznar, L. and Juráškova, V.
Incorporation of hydrogen into products of thymine radiolysis (166) 600
Dudock, B.S., see Yoshikami, D. (166) 714
Dugan, Jr., L. R., see McClain, P. E. (168) 143
Duhm, J., Deuticke, B. and Gerlach, E.
Metabolism of 2,3-diphosphoglycerate and glycolysis in human red blood cells under the influence of dipyridamole and inorganic sulfur compounds (170) 452
Dumford, S.W., see Miller, R.J. (167) 607
Dunham, P. B. and Gainer, H.
The distribution of inorganic ions in lobster muscle (150) 488
Dunn, A., Chenoweth, M. and Schaeffer, L. D.
Incorporation of ^{3}H and ^{14}C into plasma lactate following administration of [6-^{3}H-^{14}C]glucose (165) 170
Dunstone, J. R., see Franek, M. D. (165) 555
Durham, N. N., see Best, G. K. (165) 558
Duval, J., see Yoshida, H. (161) 13
Dvornik, D., see Kinoshita, J. H. (158) 472

E

Eales, L., see Hickman, R. (161) 197
Easter, D. J. and Dils, R.
Fatty acid biosynthesis. IV. Properties of acetyl-CoA carboxylase in lactating-rabbit mammary gland (152) 653
Eastwood, M. A. and Hamilton, D.
Studies on the adsorption of bile salts to non-absorbed components of diet (152) 165
Eastwood, M. A., see Boyd, G. S. (152) 159
Eaton, R. H., see Moss, D. W. (154) 609
Ebel, J-P., see Beck, G. (169) 248
Ebel, J-P., see Giege, R. (161) 125
Ebel, J-P., see Keith, G. (166) 16
Ebel, J-P., see Louisot, P. (155) 38
Ebel, J-P., see Yoshida, H. (161) 13
Ebner, K. E., see Tanahashi, N. (154) 247
Edelstein, C., see Scanu, A. (160) 32
Edwards, A. M., see Adams, J. B. (167) 122
Edwards, Ch., see Aceves, J. (150) 744
Edwards, J. B. and Keech, D. B.
Activation of pig heart propionyl-CoA carboxylase by potassium ions (159) 167
Edwards, J. L., see Correll, D. L. (168) 36
Efremov, G. D., see Huisman, T. H. J. (160) 467
Efron, M. L., Bixby, E. M., Hockaday, T. D. R., Smith, Jr., L. H. and Meshorer, E.
Hydroxyprolinemia. III. The origin of free hydroxyproline in hydroxyprolinemia. Collagen turnover. Evidence for a biosynthetic pathway in man (165) 238
Egami, F., see Fukuda, M. (159) 215
Együd, L. G., see Baker, N. (165) 293
Együd, L. G., see Otsuka, H. (165) 172
Ehrenberg, A., Eriksson, L. E. G. and Hyde, J. S.
Electron-nuclear double resonance from flavin free radicals on NADPH dehydrogenase ("old yellow enzyme") (167) 482
Ehrenfeld, E. and Koch, A. L.
RNA synthesis in penicillin spheroplasts of Escherichia coli (169) 44
Ehrenfeld, E., see Koch, A. L. (165) 262
Eichholz, A.
Studies on the organization of the brush border in intestinal epithelial cells. V. Subfractionation of enzymatic activities of the microvillus membrane (163) 101
Eichhorn, G. L., see Butzow, J. J. (154) 208
Eisen, A. Z., Jeffrey, J. J. and Gross, J.
Human skin collagenase. Isolation and mechanism of attack on the collagen molecule (151) 637
Eisenberg, S., Stein, Y. and Stein, O.
Phospholipases in arterial tissue. II. Phosphatide acyl-hydrolase and lysophosphatide acyl-hydrolase activity in human and rat arteries (164) 205
Eisenkraft, B. and Veeger, C.
Effect of 2-oxoglutarate on the catalytic activity and stability of glutamate dehydrogenase (167) 227
Eisenstadt, J., see Klein, A. (169) 543
Ekenstam, C., see Catsimpoolas, N. (168) 122
Eldjarn, L., Try, K., Ackman, R. G. and Hooper, S. N.
Different ratios of the LDD and DDD diastereoisomers of phytanic acid in patients with Refsum's disease (164) 94
Elkins, B. N., see Ezekiel, D. H. (166) 466
Ellar, D. J., see Munoz, E. (150) 531
Elleway, R. F., see Nagai, Y. (153) 766
Ellingboe, J., Nyström, E. and Sjövall, J.
A versatile lipophilic Sephadex derivative for "reversed-phase" chromatography (152) 803
Elliott, W. B., see Malviya, A. N. (153) 920
Elliott, W. B., see Malviya, A. N. (162) 195
Elliott, W. B., see Penniall, R. (157) 258
Elliott, W. H., see May, B. K. (157) 607
Elliott, W. H., see May, B. K. (166) 532
Elliott, W. H., see May, B. K. (169) 260
Elsbach, P., see Rosenbloom, A. A. (164) 72
Elyakova, L. A., Sova, V. V. and Vaskovsky, V. E.
Cellulase of marine mollusc Littorina sp. (167) 462
Emiliani, E. and Riera, B.
Enzymatic oxalate decarboxylation in Aspergillus niger. II. Hydrogen peroxide formation and other characteristics of the oxalate decarboxylase (167) 414
Emmelot, P. and Bos, C. J.
Studies on plasma membranes. V. On the lipid dependence of some phosphohydrolases of isolated rat-liver plasma membranes (150) 341
Emmelot, P. and Bos, C. J.
Studies on plasma membranes. VI. Differences in the effect of temperature on the ATPase and (Na⁺-K⁺)-ATPase activities of plasma membranes isolated from rat liver and hepatoma (150) 354
Emmelot, P., Visser, A. and Benedetti, E. L.
Studies on plasma membranes. VII. A leucyl-β-naphthylamidase-containing repeating unit on the surface of isolated liver and hepatoma plasma membranes (150) 364
Endecott, B., see Cahill, C. L. (154) 40
Enero, M. A., see Dellacha, J. M. (168) 95
Engel, J., see Formanek, H. (160) 151
Engelman, D. M. and Morowitz, H. J.
Characterization of the plasma membrane of Mycoplasma laidlawii. III. The formation and aggregation of small lipoprotein structures derived from sodium dodecyl sulfate-solubilized membrane components (150) 376
Engelman, D. M. and Morowitz, H. J.
Characterization of the plasma membrane of Mycoplasma laidlawii. IV. Structure and composition of membrane and aggregated components (150) 385
Engström, L., see Wåhlby, S. (151) 402
Ennis, H. L. and Sells, B. H.
Breakdown and re-formation of polysomes in Escherichia coli during inhibition of protein synthesis (161) 503
Entenman, C., see Swell, L. (164) 278
Entressangles, B. and Desnuelle, P.
Action of pancreatic lipase on aggregated glyceride molecules in an isotropic system (159) 285
Epstein, F. H., see Manitius, A. (150) 563
Erdmann, V. A., Thomas, G. A., Norton, J. W. and Herbst, E. J.
The effect of polyamines on the enzymatic

degradation of ribosomes (157) 43
Erdmann, V. A., see Norton, J. W. (155) 293
Eriksson, L. E. G., see Ehrenberg, A. (167) 482
Erlanson, C. and Borgström, B.
The identity of vitamin A esterase activity of rat pancreatic juice (167) 629
Erlenmeyer, H., Griesser, R., Prijs, B. und Sigel, H.
Metallionen und H_2O_2. Die Denaturiering von DNA in Abhängigheit von pH – Einfluss von Metallionen (157) 637
Erlij, D., see Aceves, J. (150) 744
Escribano, M. J. et Daquo, M.
Séparation et étude des propriétés antigéniques des peptides obtenus lors de la dégradation de la gliadine par diverses préparations de phosphatase alcaline (160) 69
Eskins, K., see Morreal, C.E. (169) 224
Esmann, V., see Pérez, M. R. (156) 414
Etienne, A. L.
Etude de l'étappe thermique de l'émission photosynthétique d'oxygène par une méthode d'écoulement (153) 895
Etzler, M. E. and Moog, F.
Immunochemical characterization of alkaline phosphatase isozymes of the young mouse duodenum (154) 150
Evans, D. and Birnstiel, M. L.
Localization of amplified ribosomal DNA in the oocyte of Xenopus laevis (166) 274
Evans, H. J., see Betts, G. F. (167) 190
Evans, H. J., see Betts, G. F. (167) 193
Evans, R.J., Bandemer, S.L., Davidson, J.A., Heinlein, K. and Vaghefi, S.S.
Binding of lipid to protein in the low-density lipoprotein from the hen's egg (164) 566
Evans, T. C., see Cheng, H. F. (168) 161
Evans, W.J., see Raison, J.K. (170) 448
Ewald, W. and Chaikoff, I. L.
Δ^5-3-Ketosteroid isomerase activities in guinea-pig adrenal glands: The role of copper ions (167) 444
Ewing, E. E. and Cherry, J. H.
Presence of AMP-rich RNA in counter-current distribution and column chromatography fractions of pea root nucleic acids (161) 331
Ezekiel, D. H. and Blumenthal, A.
A comparison of the rates of RNA and protein synthesis in Escherichia coli cells partially starved for different amino acids (161) 494
Ezekiel, D. H. and Elkins, B. N.
The stimulation of RNA synthesis by ribosome inhibitors in amino acid-starved Escherichia coli (166) 466

F

Fábián, F. and Mühlrad, A.
Effect of trinitrophenylation on myosin ATPase (162) 596
Fabrianek, J., see Herp, A. (158) 150
Fabry, T. L., see Simo, C. (160) 118
Falchuk, M. Z. and Sharp, G. W. G.
On the role of the tricarboxylic acid cycle in the stimulation of sodium transport by aldosterone (153) 706
Fambrough, D. and Bonner, J.
Selective dissociation of pea bud necleohistone (154) 601
Fang, M. and Rasmussen, H.
Ion transport and phospholipid labelling in rat liver mitochondria (153) 88
Farkaš, V., Biely, P. and Bauer, Š
Transglycolytic reactions of nucleotides of 2-deoxy-sugars. I. Biosynthesis of 2-deoxysucrose (165) 63
Farkaš, V., see Biely, P. (158) 487
Farkas, W. R.
Depolymerization of RNA by plumbous ion (155) 401
Farmer, V. C., see Bacon, J. S. D. (158) 313
Farnsworth, W. E.
A possible mechanism of regulation of rat prostate function by testosterone (150) 446
Farrant, R. K., see Keech, D. B. (151) 493
Farrelly, A. G. and Churchich, J. E.
Reconstituted aspartate aminotransferase. Physical studies (167) 280
Fasold, H., see Remold, H. (167) 399
Fausto, N. and Van Lancker, J. L.
Molecular mechanisms of liver regeneration. VI. Incorporation of [^{14}C]orotic acid into cytoplasmic RNA in normal and regenerating liver (161) 32
Favarger, P., see Rous, S. (152) 454
Favarger, P., see Rous, S. (152) 462
Fee, J. A. and Malmström, B. G.
The redox potential of fungal laccase (153) 299
Feeney, R. E., see Haynes, R. (159) 209
Feeney, R. E., see Sjöberg, L. B. (168) 79
Feingold, D. S., see Bdolah, A. (159) 176
Feix, G., see Viñuela, E. (155) 558
Feldman, E. B.
Factors modifying cholesterol uptake by intestinal rings (150) 727
Felgenhauer, K.
Immunological techniques following microelectrophoresis on polyacrylamide gel (160) 267
Feng, H. W., see Riggs, T. R. (150) 92
Ferguson, D. R., Handler, J. S. and Orloff, J.
Effect of sodium transport and vasopressin on the oxidation of palmitic acid by the toad bladder (163) 150
Ferguson, D. V., see Best, G. K. (165) 558
Fernley, R.T., see Runnegar, M.T.C. (167) 632
Fernlund, B. and Josefsson, L.
Preparation and properties of sea-urchin ribonuclease (151) 373
Fernlund, P. and Josefsson, L.
Chromactivating hormones of Pandalus borealis. Isolation and purification of the "red-pigment-concentrating hormone" 158) 262
Fex, G. and Olivecrona, T.
The metabolism of [^{3}H]oleic acid in the partially hepatectomized rat (152) 237
Fex, G. and Olivecrona, T.
Secretion of triglyceride by the liver after partial hepatectomy (164) 424
Fieldhouse, B. and Masters, C. J.
Anomalous multiplicities of lactate dehydrogenase (151) 535
Fielding, C. J.
Inactivation of lipoprotein lipase in buffered saline solutions (159) 94
Fiers, W., see De Wachter, R. (157) 195
Filipek-Wender, H., see Morgan, R. G. H. (167) 355
Filson, D. P. and Bloomfield, V. A.
The configuration of polysomes in solution (155) 169
Finean, J. B., see Thompson, J. E. (150) 405
Finkelstein, S., see Shoshan, S. (154) 261
Firshein, W. and Broker, T. R.
Inhibition of deoxycytidylic and deoxyguanylic acid kinase activity by ATP and dATP in pneumococci (166) 261
Firth, C. M. and Hales, C. N.
The relationship of some rat liver glycolytic enzyme activities to plasma insulin concentration (156) 411
Fischer, A. G., Schulz, A. R. and Oliner, L.
Thyroidal biosynthesis of iodothyronines. II. General characteristics and purification of mitochondrial monoamine oxidase (159) 460
Fischer, G. A., see Momparler, R. L. (161) 481
Fischer, S., Nagel, R. and Fuhr, J.
Interaction between reticulocyte polyribosomes and isolated human hemoglobin polypeptide chains (169) 566
Fisher, Jr., E., see Fisher, T. N. (157) 634
Fisher, J. R., see Ma, P. F. (159) 153
Fisher, R. R., and Guillory, R. J.
The action of Dio-9: Energy-linked swelling of rat-liver mitochondria (162) 182
Fisher, T. N. and Fisher, Jr., E.
Incorporation of specifically labeled [^{14}C]glucose into herpes simplex DNA (157) 634
Fishler, M. C., see Sayre, F. W. (160) 63
Fishler, M. C., see Sayre, F. W. (160) 204
Fishman, H. M. and Macey, R. I.
Calcium effects in the electrical excitability of "split" frog skin (150) 482
Fishman, M. M. and Rosenwasser, L. J.
Effect of cupric ions on the actinomycin D-DNA complex (166) 584
Fishman, M. M. and Schiff, H. F.
The use of nitrocellulose membrane filters for DNA samples (157) 419
Fishman, W. H., see Ghosh, N. K. (167) 201
Fitschen, W., see King, H. W. S. (155) 32
Fitt, P. S., Dietz, Jr., F. W. and Grunberg-Manago, M.
Activation by electrolytes and polylysine of poly A synthesis by Clostridium perfringens polynucleotide phosphorylase (151) 99
Fjellstedt, T., see Betterton, H. (170) 459
Flanagan, M. T. and Ainsworth, S.

The binding of aromatic sulphonic acids to bovine serum albumin (168) 16

Flavin, M., see Guggenheim, S. (151) 664

Flawia, M., see Olavarria, J. M. (165) 185

Fleischer, S., see Wasserman, A. R. (153) 154

Fleischman, D., see Brierley, G. P. (163) 117

Fletcher, J. C., see Bartle, K. D. (160) 106

Fluck, D. J., see Chapman, D. (163) 255

Font, J., see Bourrillon, R. (154) 28

Forbush, B., and Kok, B.
Reaction between primary and secondary electron acceptors of Photosystem II of photosynthesis (162) 243

Ford, W. H. and Ainsworth, S.
Reactions of partially oxidised hemoglobin solutions. I. Separation of intermediate compounds by CM-Sephadex chromatography (160) 1

Ford, W. H., see Ainsworth, S. (160) 18

Fork, D. C. and De Kouchkovsky, Y.
Light-induced spectroscopic changes in the 600-mμ region in leaves of a higher plant and in Chlorella (153) 891

Formanek, H. and Engel, J.
Optical rotatory dispersion of a respiratory hemeprotein of Chironomus thummi (160) 151

Forstner, G. G.
Incorporation of [1-^{14}C]glucosamine by rat intestinal microvillus membrane (150) 736

Forstner, J. F., Fortier, N. L. and Lionetti, F. J.
Factors affecting the synthesis of 2,3-diphosphoglycerate in hemolysates of human erythrocytes (158) 317

Forte, G. M., see Kasbekar, D. K. (163) 1

Forte, J. G.
The effect of inhibitors of HCl secretion on the unidirectional fluxes of chloride across bullfrog gastric mucosa (150) 136

Forte, J. G., see Kasbekar, D. K. (163) 1

Forte, L. and Landon, E. J.
Aldosterone-induced RNA synthesis in the adrenalectomized rat kidney (157) 303

Fortier, N. L., see Forstner, J. F. (158) 317

Foster, R.F., see Baker, P.F. (163) 560

Foulds, G., see Hauge, J.G. (159) 398

Fox, S. W. and Waehneldt, T. V.
The thermal synthesis of neutral and basic proteinoids (160) 246

Fox, S. W., see Waehneldt, T. V. (160) 239

Fraefel, W. and Acher, R.
The amino acid sequence of a trypsin inhibitor isolated from ascaris (Ascaris lumbricoides var. suum) (154) 615

Fraenkel-Conrat, H., see Glitz, D. G. (161) 1

Francis, A. A., see Whitson, G. L. (161) 285

Franěk, F., Brummelová, V. and Škvařil, F.
Isolation and characterization of κ and λ chains of normal human γG-immunoglobulin (160) 321

Franek, M. D. and Dunstone, J. R.
Properties of a protein-bound chondroitin sulphate of pig aorta (165) 555

Franke, R.
Die hydrophobe Wechselwirkung von polycyclischen aromatischen Kohlenwasserstoffen mit Humanserumalbumin (160) 378

Franklin, J. G. and Leslie, J.
The kinetics of the reaction of N-ethylmaleimide with denatured β-lactoglobulin and ovalbumin (160) 333

Fransson, L.-A.
Structure of dermatan sulfate. IV. Glycopeptides from the carbohydrate-protein linkage region of pig skin dermatan sulfate (156) 311

Franze de Fernández, M. T., Delius, A. E. and Paladini, A. C.
Influence of pH on the conformation of angiotensin II and analog peptides (154) 223

Frederickson, D.S., see Greten, H. (164) 185

Freeman, I. L., Steven, F. S. and Jackson, D. S.
Isolation and amino acid composition of bovine corneal polymeric collagens (154) 252

Freer, J. H., see Munoz, E. (150) 531

Freese, E., see Rhaese, H.-J. (155) 476

Freese, E., see Rhaese, H.-J. (155) 491

Freinkel, N., see Herrera, E. (170) 244

Freisler, J. V., see Wolf, P. L. (159) 212

Frenkel, A., see Klibansky, C. (150) 15

Freude, K. A.
Photochemical evidence for the participation of histidine in the active center of carboxypeptidase A_{γ} (167) 485

Freundlich, M. and Clarke, L.P.
Control of isoleucine, valine and leucine biosynthesis. V. Dual effect of α-aminobutyric acid on repression and endproduct inhibition in Escherichia coli (170) 271

Fridkin, M., see Burstein, Y. (160) 141

Friedberg, S.J. and Greene, R.C.
The synthesis of glyceryl ether glycerol in Tetrahymena pyriformis (164) 602

Frieden, E., see McDermott, J. A. (151) 541

Friedman, D. L. and Mueller, G. C.
A nuclear system for DNA replication from synchronized HeLa cells (161) 455

Friedman, P. A.
Studies on the photodynamic reaction of purines and purine analogues with methylene blue (166) 1

Friedmann, H.C., see Ohlenroth, J. (170) 465

Fritz, P. J., see Vesell, E. S. (159) 236

Fritzson, P.
5'-Nucleotidase activities in the soluble fraction of rat liver (151) 716

Frøholm, L. O., see Holm, H. (158) 459

Fromageot, P., see Darlix, J.-L. (166) 438

Fromageot, P., see Sentenac, A. (161) 299

Frot-Coutaz, J., see Got, R. (157) 599

Fry, B. A., see Bailey, A. D. (166) 726

Frydman, B., see Stevens, E. (151) 429

Frydman, B., see Stevens, E. (158) 496

Frydman, R. B. and Stevens, E.
Non-enzymatic chelation of divalent metals with uroporphyrins under physiological conditions (165) 167

Frydman, R. B., see Stevens, E. (158) 496

Fry-Shafrir, I., see De Groot, N. (161) 137

Fuchs, S., see Cuatrecasas, P. (159) 417

Fuhr, J., see Fischer, S. (169) 566

Fuhrmann, G.F. and Rothstein, A.
The transport of Zn^{2+}, Co^{2+} and Ni^{2+} into yeast cells (163) 325

Fuhrman, G.-F. and Rothstein, A.
The mechanism of the partial inhibition of fermentation in yeast by nickel ions (163) 331

Fuhrmann, G. F., see Carstensen, E. L. (156) 394

Fujii, K., see Ubuka, T. (158) 493

Fujikawa, K., Sakamoto, Y., Suzuki, T. and Kurahashi, K.
Biosynthesis of tyrocidine by a cell-free enzyme system of Bacillus brevis ATCC 8185. II. Amino acid substitution in tyrocidine (169) 520

Fujikawa, K., Suzuki, T. and Kurahashi, K.
Biosynthesis of tyrocidine by a cell-free enzyme system of Bacillus brevis ATCC

8185. I. Preparation of partially purified enzyme system and its properties (161) 232
Fujimori, E., see Pecci, J. (154) 332
Fujimoto, D.
Correlation between pronase susceptibility and hydroxyproline content of collagen fiber (154) 183
Fujimoto, D.
Isolation of collagens of high hydroxyproline, hydroxylysine and carbohydrate content from muscle layer of Ascaris lumbricoides and pig kidney (168) 537
Fujimoto, D., Koyama, T. and Tamiya, N.
N-Acetyl-β-alanine deacetylase in hog kidney (167) 407
Fujimura, S., see Sugimura, T. (170) 427
Fujino, Y. and Ito, S.
Specificity of the enzymatic synthesis of ceramide (152) 627
Fujino, Y. and Negishi, T.
Investigation of the enzymatic synthesis of sphingomyelin (152) 428
Fujioka, M. and Wada, H.
The bacterial oxidation of indole (158) 70
Fujioka, M., see Nakano, Y. (159) 19
Fujisawa, T. and Muramatsu, M.
Studies on the sedimentation properties of nuclear, nucleolar and extranucleolar nuclear RNA (169) 175
Fujisawa, T., see Muramatsu, M. (157) 476
Fujita, M., see Mizuno, N. (168) 311
Fukazawa, C. and Shimura, K.
The demonstration of species specificity of histones by immunological techniques (154) 618
Fukuda, M., Muramatsu, T., Egami, F., Takahashi, N. and Yasuda, Y.
Purification of β-xylosidase and its action on O-β-xylosyl L-serine and stem bromelain glycopeptide (159) 215
Fukui, S., see Tamao, Y. (151) 260
Fukutome, H., see Tokimatsu, H. (169) 363
Fukutome, H., see Wade, A. (161) 469
Fukuyama, K. and Tani, J.
Protein synthetic activities of mycobacterial ribosomes in vivo (155) 611
Funakubo, K., see Mukasa, H. (168) 132
Furano, A. V.
Selective loss of binding of aminoacyl-tRNA by ribosomes treated with diethanoldisulfide (161) 255
Furlan, M., Jericijo, M. and Suhar, A.
Purification and properties of a neutral protease from calf thymus nuclei (167) 154
Furman, R.H., see Bradford, R.H. (164) 172
Furnelle, J., see Winand, J. (152) 280
Furuichi, Y., see Yoshida, M. (166) 636
Furuno, I., see Mohri, T. (150) 537
Futterman, S., Rollins, M.H. and Vacano, E.
The effect on alloxan diabetes on polyenoic fatty acid synthesis by retinal tissue (164) 433

G

Gabay, S. and Vaicourt, A. J.
Studies of monoamine oxidases. I. Purification and properties of the rabbit liver mitochondrial enzyme (159) 440
Gabay, S., see George, H. (167) 555
Gabbay, K., see Kinoshita, J. H. (158) 472
Gaede, K., see Rodriguez, P. (151) 694
Gaetani, S., see Cammarano, P. (155) 302
Gaffney, Jr., P.J., see Jamieson, G.A. (154) 96
Gainer, H., see Dunham, P. B. (150) 488
Galegov, G. A., see Pravdina, N. F. (166) 279
Galeotti, T., see Kováč, L. (153) 715
Galiazzo, G., see Jori, G. (154) 1
Gallo, E., see Marengo-Rowe, A. J. (168) 58
Galper, J. B. and Babior, B. M.
Hydrogen transfer in the enzymatic desaturation of cyclohexanecarboxyl-CoA (158) 289
Galzigna, L., see Marzotto, A. (154) 450
Gan, J., Papkoff, H. and Li, C.H.
The reaction of pituitary interstitial cell-stimulating hormone with periodate (170) 189
Ganguli, N. and Bhattacharjee, S.B.
Influence of chloramphenicol on thymine-less death in bacteria (169) 545
Ganguly, M. and Westphal, U.
Steroid-protein interactions. XX. Effects of chemical modifications on progesterone-binding affinity of α_1-acid glycoprotein (170) 309
Garbus, J., see Weinbach, E.C. (162) 500
Garcia, A. F., see Ke, B. (162) 467
Gardas, A., see Kaniuga, Z. (153) 60
Gardas, A., see Kaniuga, Z. (153) 317
Gardell, S., see Dorner, R. W. (158) 336
Gardell, S., see Olsson, I. (165) 309
Garrahan, P. J., see Rega, A. F. (150) 742
Garrick, M.D. and Huisman, T.H.J.
Gene duplication of the α chain of goat hemoglobin: Evidence from a homozygous mutant (168) 585
Garwes, D., see Viñuela, E. (155) 558
Garza, R., see Walter, H. (156) 409
Garza, R., see Walter, H. (165) 507
Gaspar-Godfroid, A.
Influence du β-mercaptoéthanol sur l'état d'agrégation et l'activité ATPasique de la H-méromyosine de carotide de bovidé (167) 622
Gasper, A., see Comorosan, S. (166) 394
Gatt, S.
Purification and properties of phospholipase A_1 from rat and calf brain (159) 304
Gatt, S., see Barenholz, Y. (152) 790
Gatt, S., see Leibovitz, Z. (152) 136
Gatt, S., see Leibovitz, Z. (164) 439
Gaucher, G. M., see Price, C. C. (166) 327
Gause, G. G. and Grünberger, D.
Translational characteristics of ribosomes and coding properties of transfer RNA in the mutant of Bacterium paracoli with the increased GC content of DNA (166) 538
Gause, Jr., G.G., Loshkareva, N.P. and Zbarsky, I.B.
Effect of olivomycin and echinomycin on initiation and growth of RNA chains catalyzed by RNA polymerase (166) 752
Gazquez-Martinez, I., see Villar-Palasi, C. (159) 479
Geary, P. J., see Dagley, S. (167) 459
Geison, R. L., Rogers, Jr., W. E. and Johnson, B. C.
Comparative effects of vitamin A deficiency and controlled food consumption on adenosine 5'-triphosphate: sulfate adenylyltransferase (165) 448
Gentry, G. A., see Coward, J. E. (155) 605
George, H. and Gabay, S.
Brain aromatic aminotransferase. I. Purification and some properties of pig brain L-phenylalanine-2-oxoglutarate aminotransferase (167) 555
George, J.M., Palmer, J.M. and McCoy, A.R.
The interaction of N-ethylmaleimide and ACTH on isolated fat cells (170) 213
George, P., see Phillips, R. (162) 73
Georgieva, A., see Atanasov, B. P. (160) 255
Gerber, B. R. and Ooi, T.
Effect of dinitrophenylation on the properties of G- and F-actin (154) 162
Gerlach, E., see Duhm, J. (170) 452
Getz, G. S., Bartley, W., Lurie, D. and Notton, B. M.
The phospholipids of various sheep organs, rat liver and of their subcellular fractions (152) 325
Gholson, R. K., see Saxton, R. E. (156) 77
Ghosh, A. K., Broker, T. R. and Olson, J. M.
A kinetic study of bacteriochlorophyll pheophytinization in the protein complex from a green photosynthetic bacterium (162) 402
Ghosh, A. K. and Olson, J. M.
Effects of denaturants on the absorption spectrum of the bacteriochlorophyll-protein from the photosynthetic bacterium Chloropseudomonas ethylicum (162) 135
Ghosh, N. K., Kotowitz, L. and Fishman, W. H.
Neuraminidase in human intestinal mucosa (167) 201
Giacomoni, D. and Corneo, G.
Intracellular localization and hybridization studies of a human satellite DNA (166) 586
Gibbs, M., see Willard, J. M. (151) 438
Gibson, F., see Cotton, R. G. H. (156) 187
Gibson, F., see Cotton, R. G. H. (160) 188
Gibson, F., see Cox, G. B. (153) 1
Gibson, F., see Young, I. G. (165) 567
Gibson, J. F., AND Bray, R. C.
ESR of non-haem iron in xanthine oxidase (153) 721
Giege, R. et Ebel, J-P.
Intégrité de la séquence pCpCpA terminale des tRNA extraits de levures à différents stades de leur croissance (161) 125
Gilbert, D.S., see Baker, P.F. (163) 560
Gilmore, R. A., Stewart, J. W. and Sherman, F.
Amino acid replacements resulting from super-suppression of a nonsense mutant of yeast (161) 270
Gilmour, M. V., see Lemberg, R. (156) 407
Gilsdorf, J. R., see Nordlie, R. C. (158) 157
Giovannozzi-Sermanni, G., see De Leo, P. (170) 208
Gitzelmann, R., see Cummins, D. L. (160) 396

Glader, B. E. and Omachi, A.
Role of cellular P_i in P_i transport and metabolism in human red cells (150) 524
Glader, B. E. and Omachi, A.
Phosphate release from human erythrocytes (163) 30
Glantz, M. D., see Biermann, L. (167) 373
Glassman, E., see Shinoda, T. (160) 178
Glenn, J. L., see Turkki, P. R. (152) 104
Glimcher, M., see Shimizu, M. (168) 356
Glitz, D.G., Bradley, A. and Fraenkel-Conrat, H.
Nucleotide sequences at the 5'-linked ends of viral ribonucleic acids (161) 1
Gödeken, O. G. R., see Olavarria, J. M. (165) 185
Goedheer, J. C.
On the low-temperature fluorescence spectrum of blue-green and red algae (153) 903
Goldberg, A. M. and McCaman, R. E.
Betaine aldehyde dehydrogenase Assay and partial purification (167) 186
Goldberg, D.M., Campbell, R. and Roy, A.D.
Binding of trypsin and chymotrypsin by human intestinal mucosa (167) 613
Goldberger, R. F., see Venetianer, P. (166) 124
Goldemberg, S.H., see González, N.S. (166) 760
Goldman, D. S., see Lornitzo, A. (158) 329
Goldsmith, L. A. and Robinson, J. C.
Resistance of alkaline phosphatase of human serum to the protease of Streptomyces griseus (159) 405
Goldstein, I. J., see So, L. L. (165) 398
Goldstein, S. and Reddy, W. J.
Insulin stimulation of [^{14}C]leucine incorporation into protein (150) 733
Goldzieher, J. W., see Axelrod, L. R. (152) 391
Golichowski, A. M., see Bretthauer, R. K. (155) 549
Golub, L., see Shimizu, M. (168) 356
González, N.S., Goldemberg, S.H. and Algranati, I.D.
Protein synthesis and ribosomal distribution at different growth stages in Bacillus stearothermophilus (166) 760
Good, J. J., see Skipski, V. P. (152) 10
Good, N. E., see Izawa, S. (162) 380
Good, W. and Rose, S.M.
The kinetics of haemolysis of human erythrocytes in hypotonic solutions of glucose (163) 483
Good, W., see Coldman, M. F. (150) 194
Good, W., see Coldman, M. F. (150) 206
Goodman, D. B. P. and Rasmussen, H.
Specificity of the action of parathyroid hormone upon mitochondrial metabolism: Cyanogen bromide-derived parathyroid-hormone peptides (153) 749
Goodman, I., Oldenczak, A. P., Scherrer, J. W. and Hiatt, R. B.
On the synthesis and identification of the epinephrin metabolite 4-hydroxy-3-methoxy-DL-mandelic acid (156) 364
Goodwin, S. L., see Sherman, W. R. (158) 197
Gorchein, A.
Studies on the structure of an ornithine--containing lipid from non-sulfur purple bacteria (152) 358
Gordon, C. N. and Kleinschmidt, A. K.
High contrast staining of individual nucleic acid molecules (155) 305
Gordon, E. E. and De Hartog, M. (162) 220
Valinomycin-stimulated glycolysis in Ehrlich ascites tumor cells (162) 220
Gordon, S. G. and Kern, Jr., F.
The absorption of bile salt and fatty acid by hamster small intestine (152) 372
Gorin, E., see Biale, Y. (152) 28
Gospodarowicz, D. and Laporte, J.
Preparation of polysomes from bovine anterior pituitary gland (169) 212
Got, R., Frot-Coutaz, J., Colobert, L. et Louisot, P.
Biosynthèse des glycoprotéines dans les cellules de culture in vitro (157) 599
Got, R., see Berthillier, G. (170) 140
Goto, M., see Wada, F. (162) 518
Goto, S. and Mizuno, D.
Isolation and identification of 3',5',-terminal hydroxy phosphorylated dinucleotide (pNpNp) in the auto-degradation products of rat liver ribosomes (166) 663
Gottlich, C., see Heumann, W. (156) 429
Gottlieb, A. J. and Sussman, H. H.
Human placental alkaline phosphatase: Molecular weight and subunit structure (160) 167
Gottschalk, A. and König, W.
Studies on glycoproteins. XVIII. Formation of diborane and dimethoxyborane in the lithium borohydride test for esters as a source of misinterpretation (158) 358
Gottschalk, A., see Schauer, H. (156) 304
Gould, B. S., see Bade, M. (156) 425
Gould, G.W., see Warren, S.C. (170) 341
Gould, M. K., see Bornstein, J. (156) 31
Govindjee, see Govindjee, R. (162) 539
Govindjee, R., Rabinowitch, E. and Govindjee
Maximum quantum yield and action spectrum of photosynthesis and fluorescence in Chlorella (162) 539
Gower, D. B., see Katkov, T. (164) 134
Graafmans, W. D. J., Charles, R. and Tager, J. M.
Mitochondrial citrulline synthesis with exogenous ATP (153) 916
Graham, J. M., Higgins, J. A. and Green, C.
The isolation of rat liver plasma membrane fragments (150) 303
Grajevskaja, R., see Bresler, S. (155) 465
Granata, A. L., see Mühlrad, A. (162) 435
Gräsbeck, R., Stenman, U.-H., Puutula, L. and Visuri, K.
A procedure for detaching bound vitamin B_{12} from its transport proteins (158) 292
Gratzer, W.B., see Beaven, G.H. (168) 456
Gray, G. M., see Dod, B. J. (150) 397
Gray, R. H., Herzog, R. and Steffensen, D. M.
Gel electrophoresis of labeled nuclear proteins from bovine leukocytes (157) 344
Green, C., see Graham, J. M. (150) 303
Green, D. K., see Barratt, M. D. (152) 20
Green, J. W., see Masiak, S. J. (159) 340
Green, M., see Ke, B. (162) 467
Greenberg, J., see Donch, J. (166) 271
Greee, R.C., see Friedberg, S.J. (164) 602
Greengard, P., Kalinsky, H. J. and Manning, T. J.
Tryptophan pyrrolase activity during pregnancy (156) 198
Greenslade, K. R., see Gumaa, K. A. (158) 300
Gregory, K.F., see Ng, G.W. (170) 45
Gregory, R. P. F.
An improved preparative method for spinach catalase and evaluation of some of its properties (159) 429
Gregory, W., see Kornfeld, S. (158) 468
Greksák, M., see Kováč, L. (153) 32
Greten, H., Levy, R.I. and Frederickson, D.S.
A further characterization of lipoprotein lipase (164) 185
Griesser, R., see Erlenmeyer, H. (157) 637
Griffin, M.J., see Carubelli, R. (170) 446
Grinstein, M., see San Martin de Viale, L. C.

(158) 79
Grippo, P., see Augusti-Tocco, G. (155) 8
Grisebach, H., see Russel, D.W. (170) 210
Grisebach, H., see Sandermann, Jr., H. (156) 435
Grisebach, H., see Sandermann, Jr., H. (165) 550
Grisolia, S., Bogart, D. B. and Torralba, A.
A simple and rapid procedure for the preparation of phosphopyruvate hydratase free from phosphoglycerate phosphomutase and pyruvate kinase (151) 298
Grisolia, S., Torralba, A. and Tecson, J.
Hg^{2+}-induced dissociation of exchange reactions from catalytic activity of 2,3-diphosphoglycerate-dependent phosphoglyceromutases (151) 367
Grisolia, S., see De la Morena, E. (151) 526
Gröndahl, N. J., see Iwanaga, S. (160) 280
Groot, G. S. P. and Van den Bergh, S. G.
The role of the ADP-ATP exchange enzyme in oxidative phosphorylation (153) 22
Gros, F., see Dalgarno, L. (157) 52
Gros, F., see Dalgarno, L. (157) 64
Gros, F., see Rouvière, J. (166) 94
Grosjean, H., Wérenne, J. and Chantrenne, H.
The binding of proflavine to transfer ribonucleic acid: Dependence on secondary structure (166) 616
Groskopf, W.R., Hsieh, B., Summaria, L. and Robbins, K.C.
The specificity of human plasmin on the B-chain of oxidized bovine insulin (168) 376
Gross, J., see Eisen, A. Z. (151) 637
Gross, M., see Quirin-Stricker, C. (159) 75
Gross, N. and Rabinowitz, M.
Thymidine content and turnover in the rat (157) 648
Grove, J. and Henderson, L. M.
The metabolism of D- and L-lysine in the intact rat, perfused liver and liver mitochondria (165) 113
Groves, W. E. and Sells, B. H.
Purification of rat prolactin and growth hormone using preparative polyacrylamide gel electrophoresis (168) 113
Gruber, M., see Coolsma, J.W.Th. (169) 306
Grula, E. A., see Whitney, J. G. (158) 124
Grummt, F. and Bielka, H.
Some properties of ribosomes from eggs of Ascaris at different stages of development (161) 253
Grunau, J.A. and Daniel, V.
On ΦX174 DNA polymerase (166) 728
Grünberger, D., Holý, A. and Šorm, F.
Effect of 5'-terminal phosphate on the recognition of some dinucleoside phosphates by $[^{14}C]$amino-acyl-tRNA (157) 439
Grünberger, D., Holý, A. and Šorm, F.
Synthesis and coding properties of 8-azaguanosine-containing triribonucleoside diphosphates (161) 147
Grünberger, D., see Gause, G. G. (166) 538
Grünberger, D., see Mirzabekov, A. D. (166) 68
Grünberger, D., see Mirzabekov, A. D. (166) 75
Grunberg-Manago, M., see Fitt, P. S. (151) 99
Gruner, E., see Abood, L. G. (153) 531
Gubler, C. J., see Johnson, L. R. (156) 85
Guerin, B. et Jacques, R.
Photoinhibition de l'adaptation respiratoire chez Saccharomyces cerevisiae. II. Le spectre d'action (153) 138
Guggenheim, S. and Flavin, M.
Proton retention in the γ-elimination reaction catalysed by cystathionine γ-synthase (151) 664
Guggenheim, S., see Owens, L. D. (158) 219
Guild, W. R., see Collins, C. J. (157) 107
Guillory, R. J. and Racker, E.
Oxidative phosphorylation in brown adipose mitochondria (153) 490
Guillory, R. J., see Fisher, R. R. (162) 182
Gumaa, K. A., Greenslade, K. R. and McLean, P.
Enzymes and intermediates of the pentose phosphate pathway in liver and hepatomas (158) 300
Guskova, L.I., see Budowsky, E.I. (166) 755
Gut, J., see Santilli, V. (155) 623
Gutcho, S.
The preparation of transfer RNA from Escherichia coli (157) 76
Gutfinger, T., see Brandt, I. K. (167) 196
Gutman, M., Schejter, A. and Avi-Dor, Y.
The preparation and properties of the membranal DPNH dehydrogenase from Escherichia coli (162) 506
Gutknecht, J.
Permeability of Valonia to water and solutes: Apparent absence of aqueous membrane pores (163) 20

H

Haahti, E., see Nikkari, T. (164) 294
Habarova, M.I., see Zhenodarova, S.M. (169) 559
Hachimori, Y., see Suzuki, S. (167) 641
Hackenberger, F., see Rein, H. (167) 538
Hadjiolov, A. A., see Boyadjiev, S. I. (161) 341
Hadorn, B. and Silberberg, V. L.
Demonstration of two forms of human pancreatic carboxypeptidase A (151) 702
Hadorn, B., see Silberberg, V.L. (167) 616
Hadziyev, D., see Mehta, S.L. (169) 381
Hafkenscheid, J.C.M.
Properties of an acid phosphatase in Escherichia coli (167) 582
Hafkenscheid, J. C. M. and Bonting, S. L.
Studies on (Na$^+$ − K$^+$)-activated ATPase. XIX. Occurrence and properties of an (Na$^+$-K$^+$)-activated ATPase in Escherichia coli (151) 204
Hagen, U., see Petersen, E. E. (161) 325
Hales, C. N., see Firth, C. M. (156) 411
Hales, C. N., see Milner, R. D. G. (150) 165
Hall, P.F., see Sandler, R. (164) 445
Halle, M., see Collipp, P. J. (167) 141
Hallinan, T., see Murty, C. N. (157) 414
Hallinan, T., see Nagley, P. (163) 218
Halpern, R.M., see Rothschild, M.L. (169) 218
Halsall, D. M., see Doy, C. H. (167) 422
Halvorson, H. O., see Nakao, Y. (151) 114
Hamaguchi, H., see Yang, C.C. (168) 373
Hamilton, D., see Eastwood, M. A. (152) 165
Hamilton, J. W., Detert, A. C. and Cohn, D. V.
The effect of parathyroid hormone in vivo on the labeling of nuclear RNA from the intestinal mucosa and liver of vitamin D-deficient and normal chicks (155) 311
Hamilton, W. A., see Sale, A. J. H. (163) 37
Hanahan, D.J., see Chacko, G.K. (164) 252
Hanawalt, P., see Kanner, L. (157) 532
Handler, J. S., see Ferguson, D. R. (163) 150
Handschumacher, R. E., see Rajalakshmi, S. (155) 317
Hanna, M. W. and Sandoval, A.
Nuclear magnetic resonance studies of complexes between caffeine and aromatic donors (155) 433
Hannig, K., see Heidrich, H.-G. (168) 380
Hansen, R. G., see Rodriguez, P. (167) 199
Hansen, R. J., see Pilkis, S. J. (154) 250
Hansen, R. J., see Pilkis, S. J. (159) 189
Hansen, R.P.
4,8,12-Trimethyltridecanoic acid: Its isolation and identification from sheep perinephric fat (164) 550
Hansen, R. P., Shorland, F. B. and Prior, I. A. M.
The occurrence of 4, 8, 12-trimethyltridecanoic acid in the tissues of rats fed high levels of phytanic acid (152) 642
Hanson, J.B., see O'Brien, T.J. (169) 35
Hanson, R. S., see Cox, D. P. (158) 36
Hanus, A., see Herbage, D. (168) 544
Hara, L., see Rao, S. N. (151) 651
Harada, F., see Ikehara, M. (155) 82
Harary, I., see Seraydarian, M. W. (162) 414
Harel, L., see Bladé, E. (156) 148
Harel, L., see Bladé, E. (156) 157
Harkin, J. M., see Kirk, T. K. (165) 134
Harkin, J. M., see Kirk, T. K. (165) 145
Harkness, M. L. R. and Harkness, R. D.
Mechanism of action of thiols on the mechanical properties of connective tissues (154) 553
Harkness, R. D., see Harkness, M. L. R. (154) 553
Harmon, S.R., see Day, W.C. (167) 597
Harrap, B. S., see Nichol, A. W. (158) 165
Harrington, G. W. and Holz, Jr., G. G.
The monoenoic and docosahexaenoic fatty acids of a heterotrophic dinoflagellate (164) 137
Harris, A. B.
Rapid resolution of flavin-adenine dinucleotide and its mononucleotides on cellulose layers by aqueous ammonium acetate (158) 308
Harris, J. R.
Release of a macromolecular protein component from human erythrocyte ghosts (150) 534
Harris, R. J., Panter, R. A. and Symons, R. H.
Metabolism of deoxythymidine 3'-mono- and diphosphate in normal and T4 bacteriophage-infected Escherichia coli (161) 291
Hartlief, R. and Koningsberger, V. V.
Characterization of messenger RNA in protoplasts of Saccharomyces carlsbergensis (166) 512
Hartmann, G., see Sippel, A. (157) 218
Hasegawa, M., see Sugimura, T. (170) 427
Hassall, C. H., see Catlin, E. R. (156) 109
Hastings, J. R. B., Parish, J. H., Kirby, K. S. and Cook, E. A.
Sedimentation of rapidly labelled RNA from rat liver in different gradients (155) 603
Hata, F., see Matsuda, T. (150) 742
Hatano, S. and Tazawa, M.
Isolation, purification and characterization of myosin B from Myxomycete plasmodium (154) 507
Hauge, J. G., Foulds, G. and Bentley, R.
Kinetic isotope in enzymatic oxidations of D-[1-H]glucose and D-[1-^{2}H]glucose (159) 398
Hawker, R. W., see North, W. G. (160) 286
Hawthorne, J.N., see Prottey, C. (164) 238
Haxby, J., see Kinsky, S. C. (152) 174
Hayaishi, O., see Deguchi, T. (158) 382
Hayasaki, N., see Tsukada, K. (165) 218
Hayashi, A., Suzuki, T., Shimizu, A. and Yamamura, Y.
Properties of hemoglobin M. Uniequivalent nature of the α and β subunits in the hemoglobin molecule (168) 262
Hayashi, K., see Yang, C.C. (168) 373
Hayashi, M., see Kato, K. (165) 233
Haynes, R. and Feeney, R. E.
Properties of enzymatically cleaved inhibitors of trypsin (159) 209
Healy, J. K. and Douglas, J. B.
The effect of angiotensin on renal carbonic anhydrase (151) 520
Heaney, A., see Weller, D. L. (168) 576
Heathcote, J. G., Hill, G. J., Rothwell, P. and Slifkin, M. A.
Electron donor-acceptor properties of haematoporphyrin (153) 13
Heathcote, J. G. and Slifkin, M. A.

Electron donor–acceptor interactions of vitamin B_{12}(158) 167
Heazlitt, R., see Vierling, J.(160) 53
Heberlein, P. J. and Barnhart, M. I.
Canine plasminogen: Purification and a demonstration of multimolecular forms (168) 195
Hedeskov, C. J., see Pérez, M. R.(156) 414
Heidrich, H.-G. and Hannig, K.
The native form of beef liver catalase (168) 380
Heikkinen, E. and Kulonen, E.
Effect of age on the maturation of rat-skin collagen(160) 464
Heimberg, M., see Wilcox, H. G.(152) 424
Heinlein, K., see Evans, R. J.(164) 566
Helleiner, C. W., see Huh, T. Y.(155) 107
Heller, H. and Kulka, R. G.
Amylase isoenzymes in chick embryo pancreas(165) 393
Heller, H. and Kulka, R. G.
Ribonuclease activities of the developing chick pancreas(167) 110
Heller, P., see Ranney, H. M.(160) 112
Helmkamp, G. K. and Kondo, N. S.
Purine stacking: Effects of alkyl substituents(157) 242
Helting, T. and Rodén, L.
The carbohydrate-protein linkage region of chondroitin 6-sulfate(170) 301
Hemon, P.
Malate dehydrogenase(decarboxylating) (NADP) and α-glycerophosphate oxidase in the developing rat(151) 681
Hemon, P. and Berbey, B.
Changes of enzyme activities with diet and thyroxine during postnatal development of the rat(170) 235
Henderson, J. F., see Rosenbloom, F. M.(166) 258
Henderson, L. M., see Grove, J.(165) 113
Henderson, R. J. and Loughlin, R. E.
Complementation in vitro between cysteine auxotrophs of Salmonella typhimurium (156) 195
Hendrich, W.
Reversible photoreduction of chlorophyll a to a compound, $Ch_aH_2$610, with an absorption maximum at 610 nm(162) 265
Hendry, I., see Nichol, A. W.(156) 97
Henn, F.A. and Sperelakis, N.
Stimulative and protective action of Sr^{2+} and Ba^{2+} on (Na^+ - K^+)-ATPase from cultured heart cells(163) 415
Henney, C. S., Jefferis, R. and Stanworth, D. R.
Studies on low molecular weight peptides derived from human γG-globin. Identification of rheumatoid factor–reactive peptides in proteolytic digests(154) 295
Hensley, M. D., see Padayatty, J. D.(161) 51
Henson, G., see Coulson, W. F.(156) 135
Herbage, D., Hanus, A. et Vallet, G.
Stabilité thermique du collagène acido-soluble dans des mélanges eau-solvants organiques(168) 544
Herbst, E. J., see Erdmann, V. A.(157) 43
Herbst, E. J., see Norton, J. W.(155) 293
Herman, R.H., see Rosensweig, N.S.(170) 228
Herman, R.H., see Stifel, F.B.(170) 221
Herman, R. H., see Zakim, D.(165) 374
Herp, A., DeFilippi, J. and Fabrianek, J.
The effect of serum hyaluronidase on acidic polysaccharides and its activity in cancer(158) 150
Herp, A. and Pigman, W.
Distribution of sialic acids and other carbohydrates in skin of intact and hypophysectomized rats(165) 76
Herrera, E. and Freinkel, N.
Interrelationships between liver composition, plasma glucose and ketones, and hepatic acetyl-CoA and citric acid during prolonged starvation in the male rat (170) 244
Herrera, M. G., see Richards, K. C.(152) 632
Herriman, I. D., see Baird, G. D.(166) 162
Herzog, R., see Gray, R. H.(157) 344
Hess, B., see Kováč, L.(153) 715
Hess, J. L., see Ji, T. H.(150) 676
Hessel, B., see Iwanaga, S.(160) 280
Heumann, W., Young, D. and Gottlich, C.
Leucoindigoidine formation by an Arthrobacter species and its oxidation to indigoidine by other microorganisms(156) 429
Hiatt, R. B., see Goodman, I.(156) 364
Hibino, Y., Samejima, T. Kajiyama, S. and Nosoh, Y.
The conformational changes of porcine ceruloplasmin with denaturing reagents (168) 472
Hickman, R., Saunders, S. J., Dowdle, E. and Eales, L.
The effect of carbohydrate on δ-aminolaevulinate synthetase: The role of RNA (161) 197
Hickson, T. G. L. and Polson, A.
Some physical characteristics of the agarose molecule(165) 43
Hidalgo, C., see Rojas, E.(163) 550
Hierowski, M. and Madón, J.
The influence of 20-methylcholanthrene on 17β-estradiol binding to 9.5-S receptor molecule from rat uterus(170) 425
Higashi, K., Matsuhisa, T., Kitao, A. and Sakamoto, Y.
Selective suppression of nucleolar RNA metabolism in the absence of protein synthesis(166) 388
Higashi, S. and Hori, T.
Studies on sphingolipids of fresh-water mussel spermatozoa(152) 568
Higgins, J. A., see Graham, J. M.(150) 303
Higuchi, S., Iitaka, Y. and Tsuboi, M.
X-ray diffraction study of SPO-1 DNA (166) 717
Hilborn, D. A., see James, Jr., L. K.(151) 279
Hildreth, W. W.
Laser-induced kinetics of cytochrome oxidation and the 518 mμ absorption change in spinach leaves and chloroplasts (153) 197
Hill, E. E. and Lands, W. E. M.
Incorporation of long-chain and polyunsaturated acids into phosphatidate and phosphatidylcholine(152) 645
Hill, G. J., see Heathcote, J. C.(153) 13
Hill, H. D., see Waters, M. D.(159) 420
Hillman, R. E., Albrecht, I. and Rosenberg, L. E.
Transport of amino acids by isolated rabbit renal tubules(150) 528
Hillman, W. S.
Phytochrome spectrum of Pisum leaves and stems(162) 464
Hilton, J. L., see Owens, L. D.(158) 219
Himeno, M., Morishima, I., Sakai, F. and Onodera, K.
Purification and properties of sugar-nonspecific nuclease in pupa of silkworm, Bombyx mori Linné(167) 575
Hinckley, E., see Di Girolamo, M.(169) 387
Hind, G.

  The site of action of plastocyanin in chloroplasts treated with detergent(153)235
Hines, M.C., see Manalaysay, A.S.(168)383
Hiraga, S., see Yura, T.(169)494
Hiramatsu, K., see Aoki, K.(160)368
Hirano, S., Manabe, M., Miyazaki, N. and Onodera, K.
  Conformational analysis of monosaccharide moieties in polysaccharide chains in solution(156)213
Hirayama, K., see Ubuka, T.(158)493
Hirschowitz, B.I., see Sachs, G.(162)210
Hobbs, J.R., see Aw, S.E.(168)362
Hochstein, L.I. and Dalton, B.P.
  Factors affecting the cation requirement of a halophilic NADH dehydrogenase (167)638
Hockaday, T.D.R., see Efron, M.L.(165)238
Hoenders, H.J., Van Tol, J. and Bloemendal, H.
  Release of an N-terminal tetrapeptide from α-crystallin(160)283
Hof, H., see Mizuno, N.S.(166)656
Hofstee, B.H.J. and Bobb, D.
  Heat denaturation of chymotrypsinogen A in the presence of polyanions(168)564
Hogan, B.L.M. and Korner, A.
  Ribosomal subunits of Landschütz ascites cells during changes in polysome distribution(169)129
Hogan, B.L.M. and Korner, A.
  The role of ribosomal subunits and 80-S monomers in polysome formation in an ascites tumour cell(169)139
Hogg, J., Williams, E.J. and Johnston, R.J.
  A simplified method for measuring membrane resistances in Nitella translucens (150)518
Hogg, J., Williams, E.J. and Johnston, R.J.
  The temperature dependence of the membrane potential and resistance in Nitella translucens(150)640
Holasek, A., see Spener, F.(152)368
Holbrook, J.P., see Penniall, R.(151)700
Holbrook, J.P., see Penniall, R.(157)258
Holcenberg, J.S. and Pease, J.
  Asparagine synthesis in guinea-pig liver (158)500
Holdsworth, E.S., see Neville, E.(163)362
Holeysovsky, V. and Lazdunski, M.
  The structural properties of trypsinogen and trypsin. Alkylation and oxidation of methionines(154)457
Holland, J. and Antoni, F.
  Effect of heavy water on the cell-free protein-synthesizing system(157)663
Hollander, F.D., see Chevallier, F.(164)339
Hollmén, T., see Pikkarainen, J.(160)90
Holm, H., Frøholm, L.O. and Laland, S.
  A peptide conjugate with the sequence Phe-Pro-Val-Orn and its relationship to the biosynthesis of gramicidin S(158)459
Holman, R.T., see Marcel, Y.L.(164)25
Holman, R.T., see Pudelkewicz, C.(152)340
Holmén, H., see Aspberg, K.(160)116
Holmes, P.A. and Mansour, T.E.
  Glucose as a regulator of glycogen phosphorylase in rat diaphragm. I. Effect of glucose and related compounds on phosphorylase and glycogen levels(156)266
Holmes, P.A. and Mansour, T.E.
  Glucose as a regulator of glycogen phosphorylase in rat diaphragm. II. Effect of glucose and related compounds on phosphorylase phosphatase(156)275
Holmes, R.S. and Masters, C.J.
  A comparative study of the multiplicity of mammalian esterases(151)147
Holmes, R.S. and Masters, C.J.
  The ontogeny of pig and duck esterases (159)81
Holms, W.H., see Baillie, R.D.(170)442
Holmsen, H. and Rozenberg, M.C.
  Adenine nucleotide metabolism of blood platelets. I. Adenosine kinase and nucleotide formation from exogenous adenosine and AMP(155)326
Holmsen, H. and Rozenberg, M.C.
  Adenine nucleotide metabolism of blood platelets. III. Adenine phosphoribosyl transferase and nucleotide formation from exogenous adenine(157)266
Holmsen, H., see Rozenberg, M.C.(155)342
Holmsen, H., see Rozenberg, M.C.(157)280
Holoubek, V. and Crocker, T.T.
  DNA-associated acidic proteins(157)352
Holtzman, N.A., see Zinkham, W.H.(160)172
Holý, A. and Šorm, F.
  On the specificity of pancreatic ribonuclease towards 2',3'-cyclic phosphates derived from α-lyxofuranosyl derivatives of thymine(161)264
Holý, A., see Grünberger, D.(157)439
Holý, A., see Grünberger, D.(161)147
Holý, A., see Mirzabekov, A.D.(166)75
Holz, Jr., G.G., see Harrington, G.W.(164)137
Homann, H.R., see Tani, T.(161)309
Homann, P.H.
  Fluorescence properties of chloroplasts from manganese deficient and mutant tobacco(162)545
Honda, F. and Imamura, H.
  Inhibition of cyclic 3', 5'-nucleotide phosphodiesterase by phenothiazine and reserpine derivatives(161)267
Honjo, I. and Ozawa, K.
  Lysolecithin inhibition of mitochondrial metabolism(162)624
Honya, M., see Yagi, T.(153)699
Hoogendam, B.W., Van Ravenswaay Claasen, J.C., Bosselaar, A., Voorma, H.O. and Bosch, L.
  Chain initiation during polypeptide synthesis in cell-free bacterial systems programmed with plant viral messengers. II. The role of N-formylmethionine(157)579
Hooper, A.B.
  A nitrite-reducing enzyme from Nitrosomonas europaea. Preliminary characterization with hydroxylamine as electron donor(162)49
Hooper, S.N., see Eldjarn, L.(164)94
Hopkin, D.J., see Bell, J.B.G.(164)412
Hopkins, S.M., Sheehan, G. and Lyman, R.L.
  Fractionation of unaltered phosphatidyl [1,2-^{14}C$_2$]ethanolamines according to the degree of unsaturation of their predominant fatty acids(164)272
Hopkins, S.M., see Lyman, R.L.(152)197
Hörhold, C., see Schubert, K.(152)401
Hori, K., see Sugano, M.,(152)781
Hori, T., Sugita, M. and Arakawa, I.
  Structural elucidation of sphingoethanolamine and its distribution in acquatic animals(152)211
Hori, T., see Higashi, S.(152)568
Horiguchi, M., Kittredge, J.S. and Roberts, E.
  Biosynthesis of 2-aminoethylphosphonic acid in Tetrahymena(165)164
Horikoshi, K. and Ikeda, Y.
  Studies on the conidia of Aspergillus ory-

zae. VII. Development of protein synthesizing activity during germination (166) 505
Horinishi, H., see Nakaya, K. (161) 23
Horio, T., Nishikawa, K., Okayama, S., Horiuti, Y. Yamamoto, N. and Kakutani, Y.
The requirement of ubiquinone-10 for the ATP-forming system and ATPase system of chromatophores from Rhodospirillum rubrum (153) 913
Horiuti, Y., see Horio, T. (153) 913
Hörmann, H. and Rodriguez Fernández, C.
The characterization of clottable proteins accompanying bovine fibrinogen by determination of the terminal amino groups (168) 157
Hörmann, H., see Volpin, D. (168) 389
Horne, R. N., see Nordlie, R. C. (158) 157
Horner, W. H. and Thaker, I. H.
The metabolism of scyllo-inositol in Streptomyces griseus (165) 306
Horská, K., see Šebesta, K. (169) 281
Horwitz, J. P., see Wolf, P. L. (159) 212
Hoshita, N., see Okuda, K. (164) 381
Hosoda, S., see Nakamura, W. (158) 212
Hoveke, Th. P., see Booyse, F. M. (157) 660
Hovingh, P., see Linker, A. (165) 89
Howard, Jr., C.F.
Control of fatty acid synthesis in mitochondrial membranes (164) 448
Howland, J. L.
The reversibility of antimycin inhibition (153) 309
Howland, J. L., see Kufe, D. W. (153) 291
Howling, D., Morris, L. J. and James, A. T.
The influence of chain length on the dehydrogenation of saturated fatty acids (152) 224
Hrkal, Z. and Vodrážka, Z.
Association-dissociation equilibria in human globin solutions (160) 269
Hruska, F. E. and Danyluk, S.S.
A nuclear magnetic resonance study of thermal effects upon base stacking in oligonucleotides: ApA > p (157) 238
Hruska, F. E. and Danyluk, S.S.
A nuclear magnetic resonance study of interaction of purine and pyrimidine derivatives with acridine orange (161) 250
Hrušovská, E., see Kováč, L. (153) 43
Hsiao, T. C., Segel, W. and Tang, C. L.
Apparent aggregation of 28-S ribosomal RNA of Zea mays (157) 640
Hsieh, B., see Groskopf, W.R. (168) 376
Hsu, W. P. and Miller, G. W.
Iron in relation to aconitate hydratase activity in Glycine max. Merr. (151) 711
Hu, A.S.L., see Colby, Jr., C. (157) 149
Hu, A. S. L., see Colby, Jr., C. (157) 159
Hu, A. S. L., see Colby, Jr., C. (157) 167
Huang, M. T., see Ishizu, K. (165) 283
Huang, P.K.C. and Kosower, E.M.
Complexes of phenyldiazene (phenyldiimide) with deoxyhemoglobin and ferroheme (165) 483
Huber, C. T., see McDermott, J. A. (151) 541
Hubby, B.G., see Loeb, J.N. (166) 745
Huc, A. et Sanejouand, J.
Etude de spectre infra-rouge du collagène acido-soluble (154) 408
Huehns, E. R., see Jones, R. T. (154) 278
Huemoeller, W.A., see Ting, H.P. (163) 439
Huet, C., Lévy, M. et Pascaud, M.
Spécificité de constitution en acides gras des phospholipides des membranes mitochondriales (150) 521
Hughes, B. P., see Poulos, A. (152) 629
Hughes, S. D., see Brierley, G. P. (163) 117
Hughes, W. L., see Shah, V. C. (161) 261
Huh, T. Y. and Helleiner, C. W.
Increased DNA polymerase activity in Escherichia coli C after infection with ΦX 174 (155) 107
Huisman, T. H. J., Dozy, A. M., Wilson, J. B., Efremov, G. D. and Vaskov, B.
Sheep hemoglobin D, an α chain variant with one apparent amino acid substitution (α 15 Gly Asp) (160) 467
Huisman, T.H.J., see Garrick, M.D. (168) 585
Huisman, T. H. J., see Kleihauer, E. F. (154) 220
Hulsmann, W. C., De Jong, J. W. and Van Tol, A.
Mitochondria with loosely and tightly coupled oxidative phosphorylation in skeletal muscle (162) 292
Hultin, T. and Östner, U.
Specific unmasking of ribosomal proteins under the influence of chelating agents and increased ionic strength (160) 229
Hultin, T., see Östner, U. (154) 376
Hultquist, D. E.
The preparation and characterization of phosphorylated derivatives of histidine (153) 329
Hummeler, K., see Lowenstein, L. M. (150) 416
Humphreys, G. K., see Sayre, F. W. (160) 63
Hunt, S., see Atkinson, A. (167) 469
Hunter, A.R. and Korner, A.
Exonuclease activity in rat-liver cell sap (169) 488
Hunter, G. R., see Brierley, G. P. (163) 117
Hunter, G.R., see Settlemire, C.T. (162) 487
Huppert, J., see Stonehill, E. H. (155) 353
Hurwitz, C. and Braun, C. B.
Temperature sensitivity of the weak bonds by which chloramphenicol is held in intact cells (157) 392
Hurwitz, S.
Calcium exchange in plasma of the fowl (156) 389
Hustrulid, R., see Clausen, J. (167) 221
Hutchison, H.T. and Cronan, Jr., J.E.
The synthesis of cytidine diphosphate diglyceride by cell-free extracts of yeast (164) 606
Hutzler, J. and Dancis, J.
Conversion of lysine to saccharopine by human tissues (158) 62
Hyde, J. S., see Ehrenberg, A. (167) 482

I

Ichihara, A. and Takahashi, H.
Transaminases of branched chain amino acids. V. Activity change in developing and regenerating rat liver (167) 274
Ichikara, A., see Aki, K. (159) 276
Ichikawa, T. and Yamano, T.
The electron spin resonance and absorption spectra of microsomal cytochrome P-450 and its isocyanide complexes (153) 753
Ichishima, E., see Motai, H. (154) 586
Ichiyama, A., see Deguchi, T. (158) 382
Ide, T., see Ishibashi, S. (165) 296
Igo, R. P., Mahoney, C. P. and Limbeck, G. A.
Studies on tyrosine-α-ketoglutarate transaminase from bovine thyroid and liver tissue (151) 88
Iitaka, Y., see Higuchi, S. (166) 717
Iizuka, E.
Species specificity of the conformation of silk fibroin in solution (160) 454
Iizuka, T. and Kotani, M.
Analysis of a thermal equilibrium phenomenon between high-spin and low-spin states of ferrimyoglobin azide (154) 417
Iizuka, T., Kotani, M. and Yonetani, T.
A thermal equilibrium between high- and low-spin states in ferric cytochrome c peroxidase and some discussion on the enzyme-substrate complex (167) 257
Iizuka, T., see Uenoyama, H. (160) 159
Ikeda, K., see Yang, C.C. (168) 373
Ikeda, Y., see Horikoshi, K. (166) 505
Ikegami, I., Katoh, S. and Takamiya, A.
Nature of heme moiety and oxidation-reduction potential of cytochrome 558 in Euglena chloroplasts (162) 604
Ikehara, M., Murao, K., Harada, F. and Nishimura, S.
Synthesis of formycin triphosphate and its incorporation into ribopolynucleotide by DNA-dependent RNA polynucleotide (155) 82
Ilani, A. and Tzivoni, D.
Hydrogen ions in hydrophobic membranes (163) 429
Iliashenko, B. N., Dityatkin, S. J. and Danileichenko, V. V.
The role of a competence in the infection of Escherichia coli spheroplasts by isolated phage DNA (161) 259
Imai, M., see Yura, T. (169) 494
Imamura, H., see Honda, F. (161) 267
Infante, R., Koumanov, K. et Polonovski, J.
Specificité de position de la phospholipase posthéparine du rat (164) 436
Irmlerová, J., see Kováčová, V. (162) 157
Irvin, J. L., see Caffery, J. M. (157) 616
Irvin, J. L., see Young, S. W. (157) 643
Irvine, D., see Carrell, R. W. (154) 78
Irving, C. C. and Veazey, R. A.
Isolation of DNA and ribosomal RNA from rat liver (166) 246
Isaac, D. C., see Stanacev, N. Z. (152) 806
Isaksson, L. A. and Phillips, J. H.
Studies on microbial RNA. V. A comparison of the in vivo methylated components of ribosomal RNA from Escherichia coli and Saccharomyces cerevisiae (155) 63
Isensee, H., see Zinkham, W. H. (160) 172
Ishibashi, S., Ide, T. and Tsurufuji, S.
Role of glutamic acid as a precursor of collagen proline and hydroxyproline (165) 296
Ishibashi, T., see Koga, T. (158) 144
Ishida, H., see Yoshida, H. (158) 489
Ishida, N., see Maeda, H. (160) 249
Ishida, N., see Ono, Y. (155) 616
Ishihara, H., Sasaki, T. and Shimura, K.
Biosynthesis of bacitracin. II. Incorporation of ^{14}C-labeled amino acids into bacitracin by a cell-free preparation from Bacillus licheniformis (166) 496
Ishihara, N. and Kikuchi, G.
Studies on the functional relationship between the phosphopyruvate synthesis and the substrate level phosphorylation in guinea-pig liver mitochondria (153) 733
Ishikura, H. and Nishimura, S.
Fractionation of serine transfer ribonucleic acids from Escherichia coli and their coding properties (155) 72
Ishizu, K., Dearman, H. H., Huang, M. T. and White, J. R.
Electron paramagnetic resonance observations on biogenic semiquinone and 5-methyl phenazinium radicals (165) 283
Isliker, A., see Bron, C. (154) 61
Isomoto, A., see Watari, H. (167) 184
Isselbacher, K. J., see Alpers, D. H. (158) 414
Isselbacher, K. J., see Tanaka, K. (152) 638
Itikawa, H., Baumberg, S. and Vogel, H. J.
Enzymic basis for a genetic suppression: Accumulation and deacylation of N-acetylglutamic γ-semialdehyde in enterobacterial mutants (159) 547
Ito, E., see Nakatani, T. (156) 210
Ito, S., see Fujino, Y. (152) 627
Ito, Y., see Ono, Y. (155) 616
Itoh, M., see Mukasa, H. (168) 132
Itoh, M., see Yamashita, K. (162) 610
Itokawa, Y. and Cooper, J. R.
The enzymatic synthesis of triphosphothiamin (158) 180
IUPAC-IUB Commission on Biochemical Nomenclature
The nomenclature of lipids (152) 1
IUPAC-IUB Commission on Biochemical Nomenclature
Tentative rules for cyclitol nomenclature (165) 1
IUPAC-IUB Commission on Biochemical Nomenclature
Tentative rules. Abbreviated nomenclature of synthetic polypeptides (polymerized amino acids) (168) 1
IUPAC-IUB Commission on Biochemical Nomenclature
Tentative rules. A one-letter notation for amino acid sequences (168) 6
IUPAC-IUB Commission on Biochemical Nomenclature and IUPAC Commission on the Nomenclature of Organic Chemistry
IUPAC-IUB Tentative revised rules for the nomenclature of steroids (164) 453
Ivanov, Ch., see Mesrob, B. (160) 122
Iwabori, N., see Koizumi, T. (151) 628

Iwai, H., Kiyomoto, A. and Takeshita, M.
Enzymatic phosphorylation of D-sedoheptulose with animal liver (167) 302
Iwai, I., see Nishimura, T. (157) 221
Iwanaga, S., Blombäck, B., Gröndahl, N. J., Hessel, B. and Wallén, P.
Amino acid sequence of the N-terminal part of γ-chain in human fibrinogen (160) 280
Iwanaga, S., see Wallén, P. (154) 414
Izawa, M. and Kawashima, K.
RNA synthesis in the nucleoli of mouse ascites tumor cells in relation to nucleolar components (155) 51
Izawa, S. and Good, N. E.
The stoichiometric relation of phosphorylation to electron transport in isolated chloroplasts (162) 380

J

Jaccarini, A. and Jepson, J. B.
Enzymic 6-hydroxylation of indolealkylamines and related compounds (156) 347
Jachymczyk, W. J. and Cherry, J. H.
Studies on messenger RNA from peanut plants: In vitro polyribosome formation and protein synthesis (157) 368
Jackson, C. D. and Sells, B. H.
Countercurrent distribution of RNA from rat liver: Effect of growth hormone, thyroxine, and hydrocortisone on distribution patterns (155) 417
Jackson, D. S., see Freeman, I. L. (154) 252
Jackson, D.S., see Steven, F.S. (160) 435
Jackson, D.S., see Steven, F.S. (168) 334
Jackson, J.J., see Bosmann, H.B. (170) 6
Jacob, M., see Samec, J. (161) 377
Jacob, S. T., Sajdel, E. M. and Munro, H. N.
Presence of two RNA polymerase activities in liver nucleoli (157) 421
Jacobs, E. E., see Sun, F. F. (153) 804
Jacobs, R. M., see Williams, Jr., J. N. (154) 323
Jacobs, S. J., see Rosenkranz, H. S. (161) 428
Jacobson, A.B. and Williams, R.W.
Sedimentation studies on RNA from proplastids of Zea mays (169) 7
Jacobson, E. S. and Metzenberg, R. L.
A new gene which affects uptake of neutral and acidic amino acids in Neurospora crassa (156) 140
Jacoli, G. G.
Purification of turnip mosaic virus by gel filtration (165) 299
Jacques, R., see Guerin, B. (153) 138
Jakobssen, S. V. and Dallner, G.
Nature of the increase in liver microsomal glucose-6-phosphatase activity during the early stages of alloxan-induced diabetes (165) 380
Jakubiak, M., see Kaniuga, Z. (153) 317
James, A. T., see Howling, D. (152) 224
James, Jr., L. K. and Hilborn, D. A.
Lysozyme adsorption and activity in urea solutions (151) 279
Jamieson, G. A. and Gaffney, Jr., P. J.
Nature of the high molecular weight fraction of fibrinolytic digests of human fibrinogen (154) 96
Jamieson, J. C., see Simkin, J. L. (170) 422
Jangaard, N. O., Unkeless, J. and Atkinson, D. E.
The inhibition of citrate synthase by adenosine triphosphate (151) 225
Jänne, J., Raina, A. and Siimes, M.
Mechanism of stimulation of polyamine synthesis by growth hormone in rat liver (166) 419
Jansen, R. J., see Kroon, A. M. (155) 629
Janssen, F. W. and Ruelius, H. W.
Alcohol oxidase, a flavoprotein from several Basidiomycetes species. Crystallization by fractional precipitation with polyethylene glycol (151) 330
Janssen, F. W. and Ruelius, H. W.
Carbohydrate oxidase, a novel oxidase from Polyporus obtusus. Specificity and characterization of reaction products (167) 501
Janssen, F. W. see Ruelius, H. W. (167) 493
Jard, S., Bastide, F. et Morel, F.
Analyse de la relation "dose-effet biologique" pour l'action de l'ocytocine et de la noradrénaline sur la peau et la vessie de la grenouille (150) 124
Jard, S., see Bastide, F. (150) 113
Jarvis, B., Jeffcoat, J. and Cheeseman, G. C.
Molecular weight distribution of nisin (168) 153
Jarvis, B. C., see O'Brien, T. J. (169) 35
Jatzkewitz, H., see Mehl, E. (151) 619
Javaherian, K., see Simo, C. (160) 118
Jayko, M. E., see Sayre, F. W. (160) 63
Jayko, M. E., see Sayre, F. W. (160) 204
Jeanjean, R., see Vallée, M. (150) 599
Jeanjean, R., see Vallée, M. (150) 607
Jeffcoat, J., see Jarvis, B. (168) 153
Jefferis, R., see Henney, C. S. (154) 295
Jeffrey, J. J., see Eisen, A. Z. (151) 637
Jeffrey, P. D.
Calculation of equilibrium density gradients (158) 295
Jeffrey, S. W.
Quantitative thin-layer chromatography of chlorophylls and carotenoids from marine algae (162) 271
Jellum, E.
Metabolism of the ketoaldehyde 2-keto-3-deoxyglucose (165) 357
Jellum, E.
Formation of dicarbonyls from monosaccharides and arsenite (170) 430
Jenkinson, T. J., see Ladbrooke, B. D. (164) 101
Jensen, L. C., see Nichols, A. V. (168) 87
Jensen, R., see Labadie, M. (165) 525
Jensen, R. G. and Bassham, J. A.
Photosynthesis by isolated chloroplasts. II. Effects of addition of cofactors and intermediate compounds (153) 219
Jensen, R. G. and Bassham, J. A.
Photosynthesis by isolated chloroplasts. III. Light activation of the carboxylation reaction (153) 227
Jensen, R. G., see Bassham, J. A. (153) 211
Jensen, R. H., see Panyim, S. (160) 252
Jepson, J. B., see Coulson, W. F. (156) 135
Jepson, J. B., see Coulson, W. F. (167) 99
Jepson, J. B., see Jaccarini, A. (156) 347
Jericijo, M., see Furlan, M. (167) 154
Ji, T. H. and Benson, A. A.
Association of lipids and proteins in chloroplast lamellar membrane (150) 686
Ji, T. H., Hess, J. L. and Benson, A. A.
Studies on chloroplast membrane structure. I. Association of pigments with chloroplast lamellar protein (150) 676
Jiménez de Asúa, L. E. and Carminatti, H.
Estradiol induction of pyruvate kinase in the rat uterus (170) 254
Jirousek, L.
The reaction of thiouracil with β-lactoglobulin sulfenyl iodide (170) 152
Jirousek, L. and Cunningham, L. W.
Stimulation of thiouracil binding and the iodination system in beef thyroid microsomes (170) 160
Jobe, A., see Schulman, H. M. (169) 241
Jockusch, H., see Sarkar, S. (160) 259

John, P. C. L., see Syrett, P. J. (151) 295
Johnson, B. C., see Geison, R. L. (165) 448
Johnson, D. C. and Ryan, J. W.
Degradation of angiotensin II by a carboxypeptidase of rabbit liver (160) 196
Johnson, J. H. and Pressman, B. C.
Continuous recording of pH and pCa during calcium binding by muscle microsomes (153) 500
Johnson, L. R. and Gubler, C. J.
Studies on the physiological functions of thiamine. III. The phosphorylation of thiamine in brain (156) 85
Johnston, C. C., Bartlett, P. and Podsiadly, C. J.
Transport of α-aminoisobutyric acid by separated rabbit renal tubules (163) 417
Johnston, R. J., see Hogg, J. (150) 518
Johnston, R. J., see Hogg, J. (150) 640
Johnstone, D. B., see Weller, D. L. (157) 558
Joliot, A., see Joliot, P. (153) 625
Joliot, A., see Joliot, P. (153) 635
Joliot, P. and Joliot, A.
A polarographic method for detection of oxygen production and reduction of Hill reagent by isolated chloroplasts (153) 625
Joliot, P., Joliot, A. and Kok, B.
Analysis of the interactions between the two photosystems in isolated chloroplasts (153) 635
Jollès, J., Alais, C. and Jollès, P.
The tryptic peptide with the rennin-sensitive linkage of cow's κ-casein (168) 591
Jollès, J., see Jollès, P. (151) 532
Jollès, P., Charlemagne, D., Dianoux, A.-C., Jollès, J., Le Baron, J. L. and Saint-Blancard, J.
Comparative behaviour of six different lysozymes in the presence of an inhibitor (151) 532
Jollès, P., see Jollès, J. (168) 591
Jollès, P., see Locquet, J.-P. (167) 150
Jollow, D. J., see Proudlock, J. W. (152) 434
Jones, A. S., see Brammer, K. W. (166) 732
Jones, D., see Bacon, J. S. D. (158) 313
Jones, D. D. and Miller, W. G.
Studies on the action of carboxypeptidase B on polylysine (159) 411
Jones, D. W., see Bartle, K. D. (160) 106
Jones, L. W., see Malkin, S. (162) 297
Jones, M. D., see Bornstein, J. (156) 38
Jones, R. F., Kates, J. R. and Keller, S. J.
Protein turnover and macromolecular synthesis during growth and gametic differentiation in Chlamydomonas reinhardtii (157) 589
Jones, R. T., Brimhall, B., Huenhns, E. R. and Motulsky, A. G.
Structural characterization of hemoglobin $\mathrm{N}_{\mathrm{Seattle}}:\alpha_2{}^{A}\beta_2{}^{61\,\mathrm{Lys}\rightarrow\mathrm{Glu}}$ (154) 278
Jones, R. T., Brimhall, B. and Lisker, R.
Chemical characterization of hemoglobin Mexico and hemoglobin Chiapas (154) 488
Joo, C. N. and Kates, M.
Synthesis of the phytanyl diether analogs of phosphatidyl glycerophosphate and phosphatidyl glycerol present in Halobacterium cutirubrum (152) 800
Jorgensen, G. N. and Larson, B. L.
Conversion of phenylalanine to tyrosine in the bovine mammary secretory cell (165) 121
Jörgensen, P. L.
Regulation of the (Na⁺ + K⁺)-activated ATP hydrolyzing enzyme system in rat kidney. I. The effect of adrenalectomy and the supply of sodium on the enzyme system (151) 212
Jori, G., Galiazzo, G., Marzotto, A. and Scoffone, E.
Dye-sensitized selective photooxidation of methionine (154) 1
Josefsson, L., see Fernlund, B. (151) 373
Josefsson, L., see Fernlund, P. (158) 262
Joshi, V. C., see Aithal, H. N. (162) 66
Joshi, V. C., see Lakshmanan, M. R. (170) 392
Julian, G. R., see Cameron, H. J. (169) 373
Jung, F., see Rein H. (167) 538
Junghahn, I., see Bielka, H. (166) 698
Jungmann, R. A.
Androgen biosynthesis. I. Enzymatic cleavage of the cholesterol side-chain to dehydroepiandrosterone and 2-methylheptan-6-one (164) 110
Jurášková, V., see Drášil, V. (166) 600
Jutisz, M., see Baron, C. (168) 555

K

Kaesberg, P., see Thirion, J-P. (161) 247
Kafiani, C. A., Timofeeva, M. J., Melnikova, N. L. and Neyfakh, A. A.
Rate of RNA synthesis in haploid and diploid embryos of loach (169) 274
Kagawa, H., see Tokimatsu, H. (169) 363
Kahn, J. S.
Chlorotri-n-butyltin. An inhibitor of photophosphorylation in isolated chloroplasts (153) 203
Kajiyama, S., see Hibino, Y. (168) 472
Kajiyama, S., see Mukasa, H. (168) 132
Kakimoto, Y., Kanazawa, A., Taniguchi, K. and Sano, I.
β-Aminoisobutyrate-α-ketoglutarate transaminase in relation to β-aminoisobutyric aciduria (156) 374
Kakutani, Y., see Horio, T. (153) 913
Kaláč, J. and Rexová, L.
Enzymatic degradation of linseed mucilage. I. Isolation and characterization of extracellular enzyme produced by Aspergillus niger (167) 590
Kalb, A. J.
The separation of three L-fucose-binding proteins of Lotus tetragonolobus (168) 532
Kalb, A. J. and Lustig, A.
The molecular weight of concanavalin A (168) 366
Kalb, A. J., see Yariv, J. (165) 303
Kalinsky, H. J., see Greengard, P. (156) 198
Kallmeyer. M.-A., see Beck, G. (169) 248
Kalous, V., see Karpenko, V. (154) 245
Kalse, J. F. and Veeger, C.
Relations between conformations and activities of lipoamide dehydrogenase. I. Relation between diaphorase and lipoamide dehydrogenase activities upon binding of FAD by the apoenzyme (159) 244
Kamat, V. B. and Chapman, D.
Nuclear resonance studies of erythrocyte ghosts at 220 Mcycles/sec (163) 411
Kamat, V. B., see Ladbrooke, B. D. (164) 101
Kamei, M., see Yoshida, H. (150) 162
Kamen, M. D., see Cusanovich, M. A. (153) 376
Kamen, M. D., see Cusanovich, M. A. (153) 397
Kamen, M. D., see Cusanovich, M. A. (153) 418
Kamen, M. D., see Kassner, R. J. (153) 270
Kamen, M. D., see Maroc, J. (162) 621
Kamen, M. D., see Yamashita, J. (153) 848
Kamen, M. D., see Yamashita, J. (161) 162
Kamikubo, T., see Kato, K. (165) 233
Kaminski, M., see Baron, G. (168) 555
Kammeraat, C. and Veldstra, H.
Characterization of succinate semialdehyde dehydrogenase from rat brain (151) 1
Kanazawa, A., see Kakimoto, Y. (156) 374
Kandler, O., see Schleifer, K. H. (154) 573
Kanegasaki, S. and Takahashi, H.
Function of growth factors for rumen microorganisms. II. Metabolic fate of incorporated fatty acids in Selenomonas ruminantium (152) 40
Kaneshina, S., see Aoki, K. (160) 368
Kanetsuna, F.
Chemical analyses of mycobacterial cell walls (158) 130
Kaniuga, Z., Gardas, A., and Bryla, J.
Studies on the mechanism of inhibition of the mitochondrial electron transport by antimycin. I. Reversal of the inhibition by diethyl ether extraction (153) 60
Kaniuga, Z., Gardas, A. and Jakubiak, M.
Studies on the respiratory chain-linked NADH dehydrogenase. I. Effect of diethyl ether on particulate NADH dehydrogenase (153) 317
Kaniuga, Z., see Bryla, J. (153) 910
Kann, Jr., H. E., see Kohn, K. W. (155) 121
Kanner, L. and Hanawalt, P.
Efficiency of utilization of thymine and 5-bromouracil for normal and repair DNA synthesis in bacteria (157) 532
Kao, K-Y. T., Treadwell, C. R., Previll, J. M. and McGavack, T. H.
Connective tissue. XVII. Protocollagen hydroxylase of pig uterus (151) 568
Kari, A., see Lampiaho, K. (160) 77
Kari, A., see Pikkarainen, J. (160) 90
Karlander, E. P. and Krauss, R. W.
The laser as a light source for the photosynthesis and growth of Chlorella vannielii (153) 309
Karlish, S. J. D. and Avron, M.
Analysis of light-induced proton uptake in isolated chloroplasts (153) 878
Karlsson, K.-A. and Mårtensson, E.
Studies on sphingosines. XIV. On the phytosphingosine content of the major human kidney glycolipids (152) 230
Karlsson, K.-A. and Steen, G. O.
Studies on sphingosines. XIII. The existence of phytosphingosine in bovine kidney sphingomeylins (152) 798
Karon, H., see Chambon, P. (157) 520
Karpenko, V., Parviček, Z. and Kalous, V.
Behavior of human orosomucoid in acid media (154) 245
Kasai, M. and Oosawa, F.
The exchangeability of actin-bound calcium with various divalent cations (154) 520
Kasbekar, D. K., Forte, G. M. and Forte, J. G.
Phospholipid turnover and ultrastructural changes in resting and secreting bullfrog gastric mucosa (163) 1
Kassab, R., Roustan, C. et Pradel, L.-A.
Site actif des ATP: guanidine phosphotransférases. I. Réaction des groupes ε-NH$_2$ lysine essentiels avec le 1-diméthylaminonaphthalène-5-sulfochlorure (167) 308
Kassab, R., see Pradel, L.-A. (154) 305
Kassab, R., see Pradel, L.-A. (167) 317
Kassab, R., see Roustan, C. (167) 326
Kassner, R. J. and Kamen, M. D.
Trace metal composition of photosynthetic bacteria (153) 270
Kates, J. R., see Jones, R. F. (157) 589
Kates, M., see Joo, C. N. (152) 800
Katkov, T. and Gower, D. B.
The biosynthesis of 5α-androst-16-en-3-one from progesterone by boar testis homogenate (164) 134
Kato, K., Hayashi, M. and Kamikubo, T.
Isolation of 5,6-dimethylbenzimidazolyl cobamide coenzyme as a cofactor for glu-

tamate formation from Acetobacter suboxydans (165) 233
Katoh, S., see Ikegami, I. (162) 604
Katz, A. M.
Effects of alkali metal ions on the Mg^{2+}-activated ATPase activity of reconstituted actomyosin (162) 79
Katz, G., see Yoshikami, D. (166) 714
Katz, S.
Partial molar volume and conformational changes produced by the denaturation of albumin by guanidine hydrochloride (154) 468
Kaufmann, H., see Schmid, K. (154) 565
Kawade, Y., see Tokimatsu, H. (169) 363
Kawade, Y., see Wade, A. (161) 469
Kawanami, J., Kimura, A. and Otsuka, H.
Siolipin A: A new lipoamino acid ester isolated from Streptomyces sioyaensis (152) 808
Kawasaki, T., see Bernardi, G. (160) 301
Kawashima, K., see Izawa, M. (155) 51
Kay, C. M., see McCubbin, W. D. (154) 239
Kay, C. M., see Nihei, T. (160) 46
Kay, C. M., see Oikawa, K. (168) 164
Kaye, A. M. and Leboy, P. S.
Methylation of RNA by mouse organs and tumors: Ionic stimulation in vitro (157) 289
Kaziro, Y., see Yoshida, M. (166) 636
Kaziro, Y., see Yoshida, M. (166) 646
Ke, B., Green, M., Vernon, L. P. and Garcia, A. F.
Some optical properties of a "carotenoid complex" derived from Rhodospirillum rubrum (162) 467
Ke, B., see Seliskar, C. J. (153) 685
Keech, D. B. and Farrant, R. K.
The reactive lysine residue at the allosteric site of sheep kidney pyruvate carboxylase (151) 493
Keech, D. B., see Barns, R. J. (159) 514
Keech, D. B., see Edwards, J. B. (159) 167
Keighley, G., see Lowy, P. H. (160) 413
Keith, G. et Ebel, J-P.
Action de l'anhydride acétique sur les RNA de levure en milieu diméthylformamide (166) 16
Keller, A. I., see Ciccone, J. R. (163) 108
Keller, D., see Singh, H. (169) 150
Keller, D. M.
Accumulation of arginine by dog kidney cortex mitochondria (153) 113
Keller, E. B., see Yoshikami, D. (166) 714
Keller, S. J., see Jones, R. F. (157) 589
Kelley, W. N., see Rosenbloom, F. M. (166) 258
Kendal, A. Biddle, F. and Belyavin, G.
Influenza virus neuraminidase and the viral surface (165) 419
Kennedy, I. R., Morris, J. A., and Mortenson, L. E.
N_2 fixation by purified components of the N_2-fixing system of Clostridium pasteurianum (153) 777
Kepes, A., see Rouvière, J. (166) 94
Kepner, G. R. and Macey, R. E.
Membrane enzyme systems: Molecular size determinations by radiation inactivation (163) 188
Kerkay, J. and Westphal, U.
Steriod-protein interactions. XIX. Complex formation between α_1-acid glycoprotein and steroid hormones (170) 324
Kern, Jr., F., see Gordon, S. G. (152) 372
Kertesz, D.
The reduction of ferricytochrome c during the enzymic oxidation of DOPA (167) 250
Kerwin, R. M., see Ruelius, H. W. (167) 493
Kessel, D. and Shurin, S. B.
Transport of two non-metabolized nucleosides, deoxycytidine and cytosine arabinoside, in a sub-line of the L1210 murine leukemia (163) 179
Keto, A. I. and Doherty, M. D.
Heterogeneity of pig heart creatine kinase (151) 721
Khayat, M. H., see Vandermeers, A. (158) 448
Kidman, A. D., Ackrell, B. A. C. and Asato, R. N.
Properties of three isoenzymes of Clostridium pasteurianum hydrogenase (159) 185
Kiese, M., see Von Jagow, R. (158) 45
Kihara, H. K., see Sakai, H. (157) 630
Kikuchi, G., see Ishihara, N. (153) 733
Kim, J. H., Boyse, E. A., Old, J. J. and Campbell, H. A.
Inhibition of HeLa cell cultures by preparations of Escherichia coli L-asparaginase (158) 476
Kim, K.-H. and Cohen, P. P.
Actinomycin D inhibition of thyroxine-induced synthesis of carbamyl phosphate synthetase (166) 574
Kim, S., see Paik, W. K. (167) 209
Kimelberg, H. K., see Nicholls, P. (162) 11
Kimizuka, H., see Yamauchi, A. (150) 181
Kimura, A., see Kawanami, J. (152) 808
King, C. A.
A general study on the adsorption of protein by tissue (154) 269
King, C. L., see Morreal, C. E. (169) 224
King, H. W. S. and Fitschen, W.
Characterization of RNA from the smooth endoplasmic reticulum of rat liver (155) 32
Kinoshita, J. H., Dvornik, D., Kraml, M. and Gabbay, K.
The effect on an aldose reductase inhibitor on the galactose-exposed rabbit lens (158) 472
Kinsella, J. E.
The incorporation of [$^{14}C_3$]glycerol into lipids by dispersed bovine mammary cells (164) 540
Kinsella, J. E. and McCarthy, R. D.
Biosynthesis of secretory lipids from [2-^{14}C]acetate by bovine mammary cells in vitro (164) 518
Kinsella, J. E. and McCarthy, R. D.
Lipid composition and secretory activity of bovine mammary cells in vitro (164) 530
Kinsky, C. B., see Demel, R. A. (150) 655
Kinsky, C. B., see Kinsky, S. C. (152) 174
Kinsky, S. C., Haxby, J., Kinsky, C. B., Demel, R. A. and Van Deenen, L. L. M.
Effect of cholesterol incorporation on the sensitivity of liposomes to the polyene antibiotic, filipin (152) 174
Kinsky, S. C., see Demel, R. A. (150) 1
Kinsky, S. C., see Demel, R. A. (150) 655
Kirby, K. S., see Brimacombe, R. L. C. (157) 362
Kirby, K. S., see Hastings, J. R. B. (155) 603
Kirchberger, M. A., Martin, D. G., Leaf, A. and Sharp, G. W. G.
The effect of aldosterone on glucose metabolism in toad bladder (165) 22
Kirilov, S., see Bresler, S. (155) 465
Kirk, M., see Bassham, J. A. (153) 211
Kirk, T. K., Harkin, J. M. and Cowling, E. B.
Oxidation of guaiacyl- and veratryl-glycerol-β-guaiacyl ether by Polyporus versicolor and Stereum frustulatum (165) 134
Kirk, T. K., Harkin, J. M. and Cowling, E. B.
Degradation of the lignin model compound syringylglycol-β-guaiacyl ether by

Polyporus versicolor and Stereum frustulatum (165) 145
Kirkwood, S., see Salo, W. L. (151) 484
Kise, T., see Sugita, Y. (160) 291
Kishizaki, A., see Wada, A. (166) 29
Kitagawa, H., see Mohri, T. (150) 537
Kitamura, M., Sakaguchi, S. and Sakaguchi, G.
Purification and some properties of Clostridium botulinum type-E toxin (168) 207
Kitao, A., see Higashi, K. (166) 388
Kithier, K., Masopust, J. and Rádl, J.
Fetal α-globulin of bovine serum differing from fetuin (160) 135
Kito, Y., Azuma, M. and Maeda, Y.
Circular dichroism of squid rhodopsin (154) 352
Kittredge, J. S., see Horiguchi, M. (165) 164
Kivirikko, K. I., Bright, H. J. and Prockop, D. J.
Kinetic patterns of protocollagen hydroxylase and further studies on the polypeptide substrate (151) 558
Kivirikko, K. I., see Bhatnagar, R. S. (154) 196
Kiyomoto, A., see Iwai, H. (167) 302
Klamerth, O. L.
Influence of glyoxal on cell function (155) 271
Kleihauer, E. F., Reynolds, C. A., Dozy, A. M., Wilson, J. B., Moores, R. R., Berenson, M. P., Wright, C.-S. and Huisman, T. H. J.
Hemoglobin$_{\text{Bibba}}$ or $\alpha_2^{136\text{Pro}}\beta_2$, an unstable α-chain abnormal hemoglobin (154) 220
Klein, A., Mathews, C. K., Eisenstadt, J. and Lengyel, P.
Further studies on the requirement for formyl residues in the synthesis of bacteriophage T_4-proteins (169) 543
Klein, L. A., see Carstensen, E. L. (156) 394
Klein, W. H., see Correll, D. L. (168) 36
Kleinschmidt, A. K., see Gordon, C. N. (155) 305
Klibansky, C., London, Y., Frenkel, A. and De Vries, A.
Enhancing action of synthetic and natural basic polypeptides on erythrocyte-ghost phospholipid hydrolysis by phospholipase A (150) 15
Kline, E. S., see Molinary, S. V. (158) 177
Kluge, H. und Wieczorek, V.
Der Einfluss von Askorbinsäure auf die zytoplasmatische AMP-Aminohydrolase des Rattenhirns (167) 621
Knight, G. J. and Price, C. A.
Measurements of s-ρ coordinates during the development of Euglena chloroplasts (158) 283
Knopp, J. A. and Longworth, J. W.
Energy transfer in oligotyrosyl compounds: Fluorescence quenching as a function of the phenolic hydroxyl groups (154) 436
Knowles, C. J. and Redfearn, E. R.
The effect of combined-nitrogen sources on the synthesis and function of the electron transport system of Azotobacter vinelandii (162) 348
Knowles, C. O., see Pennington, S. N. (167) 479
Knowles, J. R. and Preston, J. M.
A convenient titrant for α-chymotrypsin and trypsin (151) 290
Knüsel, F., see Wehrli, W. (157) 215
Knutsen, G.
Repressed and derepressed synthesis of phosphatases during synchronous growth of Chlorella pyrenoidosa (161) 205
Kobashi, K.
Catalytic oxidation of sulfhydryl groups by o-phenanthroline copper complex (158) 239
Kobayashi, K., see Ubuka, T. (158) 493
Kobayashi, M., see Seno, T. (169) 80
Koch, A. L. and Ehrenfeld, E.
The size and shape of bacteria by light scattering measurements (165) 262
Koch, A. L., see Ehrenfeld, E. (169) 44
Kochwa, S., see Ross, J. (154) 70
Kodaira, K., see Naora, H. (161) 276
Kodama, H.
3-(S-Cysteinyl)glutaric acid, S-(1-methyl-2-carboxyethyl) cysteine and S-(1,2-dimethyl-2-carboxyethyl) cysteine in human urine (165) 432
Kodama, H., see Ubuka, T. (158) 493
Kodama, R. M. and Tedeschi, H.
Observations on the permeability of thymocytes to non-electrolytes (163) 277
Koga, T., Ishibashi, T., Sugiyama, K. and Tanaka, A.
The significance of the size of the polysaccharide portion for adjuvanticity of a peptidoglycolipid (wax D) of Mycobacteria (158) 144
Kohen, C., see Kohen, E. (158) 185
Kohen, C., see Kohen, E. (167) 635
Kohen, E., Kohen, C., Thorell, B.
Kinetics of enzyme-substrate reactions in single living cells (167) 635
Kohen, E., Kohen, C., Thorell, B. and Akerman, L.
Kinetics of the fluorescence response to microelectrophoretically introduced metabolites in the single living cell (158) 185
Köhler, D., see Lüttge, U. (150) 452
Kohn, K. W., Bono, Jr., V. H. and Kann, Jr., H. E.
Anthramycin, a new type of DNA-inhibiting antibiotic: Reaction with DNA and effect on nucleic acid synthesis in mouse leukemia cells (155) 121
Koide, S. S., see Botte, V. (152) 396
Koizumi, T., Suematsu, T., Iwabori, N. and Abe, H.
Changes in N-acetyl-β-glucosaminidase activity in hepatic damage (151) 628
Koj, A.
The measurement of absolute and relative synthesis rates of fibrinogen in vivo (165) 97
Kok, B., see Joliot, P. (153) 635
Kolb, E., see Nelson, T. E. (167) 212
Komano, T. and Sinsheimer, R. L.
Preparation and purification of ΦX-RF component I (155) 295
Kondo, N. S., see Helmkamp, G. K. (157) 242
Koneru, P., see Price, C. C. (166) 327
König, W., see Gottschalk, A. (158) 358
Konikova, A. S., Morenkova, S. A. and Kritzman, M. G.
On the precursors of insulin molecules (168) 252
Koningsberger, V. V., see Hartlief, R. (166) 512
Konishi, K., see Nakamaru, Y. (159) 206
Kornberg, H. L., see Romano, A. H. (158) 491
Korner, A., see Hogan, B. L. M. (169) 129
Korner, A., see Hogan, B. L. M. (169) 139
Korner, A., see Hunter, A. R. (169) 488
Kornfeld, R. and Noll, C.
Amino sugar metabolism in erythrocytes (170) 77
Kornfeld, S. and Gregory, W.
The conversion of glucosamine to glucose by white blood cell cultures (158) 468
Kosaka, A., see Saxton, R. E. (156) 77

Koshland, Jr., D. E., see Carraway, K. L. (160) 272
Kosower, E. M., see Huang, P.-K. C. (165) 483
Kössel, H.
Studies on polynucleotides. LXXXIII. Synthesis in vitro of the tripeptide valyl-seryl-lysine directed by poly r-(G-U-A-A) (157) 91
Koster, J. F. and Veeger, C.
On the catalytic mechanism of D-amino-acid oxidase (151) 11
Koster, J. F., Veeger, C. and McCormick, D. B.
Photoreduction of amino-acid oxidase in the presence of free flavin and the effect of urea (153) 724
Kotake, Y., see Yoshino, M. (167) 216
Kotaki, A., Sugiura, N. and Yagi, K.
Circular dichroic spectra of D-amino-acid oxidase and its complexes (151) 689
Kotaki, A., see Yagi, K. (151) 343
Kotaki, A., see Yagi, K. (159) 1
Kotani, M., see Iizuka, T. (154) 417
Kotani, M., see Iizuka, T. (167) 257
Kotani, M., see Uenoyama, H. (160) 159
Kotowitz, L., see Ghosh, N. K. (167) 201
Koumanov, K., see Infante, R. (164) 436
Kouvelas, E. D. and Manchester, K. L.
The effects of denervation on the metabolism of acetate by isolated rat diaphragm muscle (164) 132
Kováč, L., Bednárová, H. and Greksák, M.
Oxidative phosphorylation in yeast. I. Isolation and properties of phosphorylating mitochondria from stationary phase cells (153) 32
Kováč, L., Galeotti, T. and Hess, B.
Oligomycin-like inhibition of yeast respiration by N,N'-dicyclohexylcarbodiimide and the nature of energy coupling in intact yeast cells (153) 715
Kováč, L. and Hrušovská, E.
Oxidative phosphorylation in yeast. II. An oxidative phosphorylation-deficient mutant (153) 43
Kováč, L. and Weissová, K.
Oxidative phosphorylation in yeast. III. ATPase activity of the mitochondrial fraction from a cytoplasmic respiratory-deficient mutant (153) 55
Kováč, L., see Kováčová, V. (162) 157
Kováčová, V., Irmlerová and Kováč, L.
Oxidative phosphorylation in yeast. IV. Combination of a nuclear mutation affecting oxidative phosphorylation with cytoplasmic mutation to respiratory deficiency (162) 157
Koyama, T., see Fujimoto, D. (167) 407
Koyanagi, T., see Maeda, H. (160) 249
Kraal, B., see Verhoef, N. J. (155) 456
Kraemer, P. M.
Cytotoxic, hemolytic and phospholipase contaminants of commercial neuraminidases (167) 205
Krahl, M. E., see Bornstein, J. (156) 31
Krahl, M. E., see Pilkis, S. J. (154) 250
Krakow, J. S.
Azotobacter vinelandii RNA polymerase. V. Unprimed synthesis of poly A.poly U (166) 459
Králová, B., see Šicho, V. (165) 459
Kramar, R., Müller, M. and Salvenmoser, F.
Absence of NADH: NAD⁺ oxidoreductase activity in mitochondrial NAD(P) transhydrogenase (162) 289
Kramer, R., see Seubert, W. (164) 498
Krames, B. and Page, E.
Effects of electron microscopic fixatives on cell membranes of the perfused rat heart (150) 24
Kraml, M., see Kinoshita, J. H. (158) 472
Kratz, F.
Die Beziehung zwischen der Aktivität der Cumarin-hydroxylase und dem Cytochrom P-450 Gehalt von Kaninchenlebermikrosomen (165) 176
Krauss, R. W., see Karlander, E. P. (153) 309
Kreil, G., see Bachmayer, H. (169) 95
Kreil, G., see Davis, K. A. (162) 627
Kriek, E.
Difference in binding of 2-acetylaminofluorene to rat liver DNA and ribosomal RNA in vivo (161) 273
Krishnan, R. S. and Daniel, Jr., J. C.
Composition of 'blastokinin' from rabbit uterus (168) 579
Kristensen, P. and Schousboe, A.
The role of glycolysis in energy production in the isolated skin of the brown frog (153) 132
Kristiansen, T. and Porath, J.
Studies on blood group substances. I. Purification of active material from hog gastric mucin by specific precipitation with Vicia cracca phytohemagglutinin (158) 351
Kritchevsky, D., see Rothblat, G. H. (164) 327
Kritzman, M. G., see Konikova, A. S. (168) 252
Krob, E. J., see Walter, H. (165) 507
Kröger, H., see Petersen, E. E. (161) 325
Krongelb, M., Smith, T. A. and Abeles, R. H.
The formation of an enzyme-bound β-carbanion in the enzymic conversion of L-homoserine to α-ketobutyrate (167) 473
Kroon, A. M. and Jansen, R. J.
The effect of low concentrations of chloramphenicol on beating rat-heart cells in tissue culture (155) 629
Kroon, A. M., see Van Bruggen, E. F. J. (161) 402
Krueger, R. C., see Rees, A. W. (161) 558
Kruh, J.
Biosynthèse d'hémoglobine par des préparations de membranes de réticulocytes (169) 511
Kruh, J., Blum, N., Tichonicky, L. et Reibel, L.
Hydroxylamine et biosynthèse de l'hémoglobine par les reticulocytes (161) 215
Kruh, J. et Labie, D.
Action d'histones de diverses origines sur la biosynthèse acellulaire de l'hémoglobine et sur les acides ribonucléiques de réticulocytes (161) 518
Kruse, H., see Turbeck, B. O. (163) 354
Kruski, A. W. and Narayan, K. A.
Some quantitative aspects of disc electrophoresis (168) 570
Krutilina, A. I., see Mirzabekov, A. D. (166) 75
Krygier, V. and Momparler, R. L.
The regulatory properties of deoxyadenosine kinase (161) 578
Kufe, D. W. and Howland, J. L.
Oxidative phosphorylation in Corynebacterium diphtheriae (153) 291
Kühn, K., see Volpin, D. (168) 389
Kulick, R. J. and Barnes, F. W.
Heterogeneity of supernatant malate dehydrogenase (167) 1
Kulka, R. G., see Heller, H. (165) 393
Kulka, R. G., see Heller, H. (167) 110
Kulonen, E., see Heikkinen, E. (160) 464
Kulonen, E., see Lampiaho, K. (160) 77
Kulonen, E., see Pikkarainen, J. (160) 90
Kung, S. D. and Williams, J. P.

Isolation of chloroplasts free from nuclear DNA contamination (169) 265
Kuo, J. F.
Effects of Bacillus subtilis protease, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose untilization and its inhibition by avenaciolide, piericidin A and puromycin (165) 208
Kurahashi, K., see Fujikawa, K. (161) 232
Kurahashi, K., see Fujikawa, K. (169) 520
Kurahasi, K., see Abood, L. G. (153) 531
Kuramitsu, H. K.
Concerted feedback inhibition of aspartokinase from Bacillus stearothermophilus (167) 643
Kurien, M. M., see Sherman, W. R. (158) 197
Kuroda, M., see Watari, H. (167) 184
Kushmerick, M. J. and Davies, R. E.
The role of phosphate compounds in thaw contraction and the mechanism of thaw rigor (153) 279
Kushnir, L. D.
Studies on a material which induces electrical excitability in bimolecular lipid membranes. I. Production, isolation, gross identification and assay (150) 285
Kuwaki, T., see Ubuka, T. (158) 493
Kwan, B., see Cotlier, E. (150) 705

L

Labadie, M., Jensen, R. et Neuzil, E.
Recherches sur l'évolution pré-biologique. III. Les acides azulmiques noirs formés à partir du cyanure d'ammonium (165) 525

Labbe, P., Volland, Chr. et Chaix, P.
Étude de l'activité ferrochélatase des mitochondries de levure (159) 527

LaBella, F. S., Vivian, S. and Queen, G.
Abundance of cystathionine in the pineal body. Free amino acids and related compounds of bovine pineal, anterior and posterior pituitary, and brain (158) 286

Labie, D., see Kruh, J. (161) 518

Labouesse, J., see Béchet, J. J. (151) 165

Lacy, D., see Bell, J. B. G. (164) 412

Ladbrooke, B. D., Jenkinson, T. J., Kamat, V. B. and Chapman, D.
Physical studies of myelin. I. Thermal analysis (164) 101

Ladbrooke, B. D., Williams, R. M. and Chapman, D.
Studies on lecithin-cholesterol-water interactions by differential scanning calorimetry and X-ray diffraction (150) 333

Lado, P., Schwendimann, M. and Marré, E.
Repression of isocitrate lyase synthesis in seeds germinated in the presence of glucose (157) 140

Laga, E., see Sussman, H. H. (151) 281

Laishley, E. J. and Bernlohr, R. W.
The regulation and kincetics of the two ornithine transcarbamylase enzymes of Bacillus licheniformis (167) 547

Lajtha, A., see Margolis, R. K. (163) 374

Lakshmanan, M. R., Cama, H. R., Joshi, V. C. and Ramasarma, T.
Metabolism of ubiquinone in relation to vitamin A status in the rat (170) 392

Lakshmanan, M. R., see Perumal, A. S. (170) 399

Laland, S., see Holm, H. (158) 459

Lalitha, S., see Ting, H. P. (163) 439

Lamar, Jr., C.
Studies on two glutaminase systems from rat kidney (151) 188

Lamb, A. J., Clark-Walker, G. D. and Linnane, A. W.
The biogenesis of mitochondria. IV. The differentiation of mitochondrial and cytoplasmic protein synthesizing systems in vitro by antibiotics (161) 415

Lamberts, I., see Seubert, W. (164) 498

L'Amie, R., see Bartle, K. D. (160) 106

Lamm, M. E., see Walsh, J. A. (168) 64

Lampiaho, K., Niinikoski, J., Kari, A. and Kulonen, E.
Fractionation of pepsin-digested, denatured collagen (160) 77

Lampiaho, K., see Pikkarainen, J. (160) 90

La Nauze, J. M. and Rosenberg, H.
The indentification of 2-phosphonoacetaldehyde as an intermediate in the degradation of 2-aminoethylphosphonate by Bacillus cereus (165) 438

La Nauze, J. M., see Rosenberg, H. (156) 381

Land, E. J. and Swallow, A. J.
One-electron reactions in biochemical systems as studied by pulse radiolysis. I. NAD and related compounds (162) 327

Lande, S., Sribney, M., McDonald, R. K. and Baxt, W.
Pituitary peptides. Naturally occurring analogues of porcine corticotropin (154) 429

Landi, L., see Pasquali, P. (158) 482

Landi, L., see Pasquali, P. (165) 561

Landon, E. J., see Forte, L. (157) 303

Landriscina, C., see Quagliariello, E. (164) 12

Lands, W. E. M. and Samuelsson, B.
Phospholipid precursors of prostaglandins (164) 426

Lands, W. E. M., see Hill, E. E. (152) 645

Lane, B. G., see Nichols, J. L. (166) 605

Lankford, C. E., see Byers, B. R. (165) 563

Lapidot, Y., De Groot, N., Rappoport, S. and Panet, A.
A chemical synthesis of glycylglycyl [^{14}C]phenylalanyl-tRNA and glycylglycylglycyl [^{14}C]phenylalanyl-tRNA (157) 433

Lapidot, Y., see De Groot, N. (161) 137

Laporte, J., see Gospodarowicz, D. (169) 212

Larner, J., see Nelson, T. E. (167) 212

Larsen, P. O. and Sørensen, H.
m-Carboxy-substituted aromatic amino acids in plant metabolism. IV. Transformation of 3-(3-carboxyphenyl) alanine into 3-(3-carboxy-4-hydroxyphenyl) alanine in Reseda lutea L. and Reseda odorata L. (156) 190

Larson, B. L., see Jorgensen, G. N. (165) 121

Laskowski, Sr., M., see Sulkowski, E. (157) 207

Lata, G. F., see Attallah, N. A. (168) 321

Lau, Y. C., see Bilinkski, E. (159) 496

Laue, P. and MacDonald, R. E.
Studies on the relation of thiomethyl-β-D-galactoside accumulation to thiomethyl-β-D-galactoside phosphorylation in Staphylococcus aureus HS1159 (165) 410

Lauinger, C., see Sasaoka, K. (156) 128

Laurell, S.
Separation and characterization of phytanic acid-containing plasma triglycerides from a patient with Refsum's disease (152) 75

Laurell, S.
The action of lipoprotein lipase on glyceryl-triphytanate (152) 80

Lauterbach, F.
Comparison of intestinal penetration of cortisol and convallatoxin: Demonstration of a transport mechanism for cardiotonic steroids (150) 146

Lavorel, J.
Sur une relation entre fluorescence et luminescence dans les systèmes photosynthétiques (153) 727

Lawley, P. D., Brookes, P., Magee, P. N., Craddock, V. M. and Swann, P. F.
Methylated bases in liver nucleic acids from rats treated with dimethylnitrosamine (157) 646

Lawley, P. D., see Venitt, S. (155) 521

Lazdunski, M., see Holeysovsky, V. (154) 457

Leaf, A., see Kirchberger, M. A. (165) 22

Leake, R. E., Mayne, R. and Barry, J. M.
Increase during lactation of RNA synthe-

sis by isolated liver nuclei (157) 198
Lebar, R., see Olomucki, A. (151) 353
Le Baron, J. L., see Jollès, P. (151) 532
Leboy, P. S., see Kaye, A. M. (157) 289
Lee, C. and Serif, G. S.
2-Amino-6-(methylthio)caproic acid, a methionine homolog and precursor of progoitrin (165) 569
Lee, P. C. and De Busk, A. G.
Amino acid incorporation by cell-free extracts of Neurospora crassa (157) 427
Lee, S. Y., Nakao, Y. and Bock, R. M.
The nucleases of yeast. II. Purification, properties and specificity of an endonuclease from yeast (151) 126
Lee, S. Y., see Nakao, Y. (151) 114
Leeman, U., see Day, W. C. (167) 597
Legler, G.
Labelling of the active centre of a β-glucosidase (151) 728
Lehmann, H., see Marengo-Rowe, A. J. (168) 58
Leibholz, J.
3-Methylhistidine in the blood plasma of the sheep (170) 432
Leibovitz, Z. and Gatt, S.
Enzymatic hydrolysis of sphingolipids. VII. Hydrolysis of gangliosides by a neuraminidase from calf brain (152) 136
Leibovitz, Z. and Gatt, S.
Isolation of lysophospholipase, free of phospholipase activity, from rat brain (164) 439
Leick, V. and Plesner, P.
Formation of ribosomes in Tetrahymena pyriformis (169) 398
Leick, V. and Plesner, P.
Precursors of ribosomal sub-units in Tetrahymena pyriformis (169) 409
Leijnse, B., see Penders, T. J. (168) 588
Leijnse, B., see Van Eyk, H. G. (160) 126
Leitzmann, C. and Bernlohr, R. W.
Threonine dehydratase of Bacillus licheniformis. I. Purification and properties (151) 449
Leitzmann, C. and Bernlohr, R. W.
Threonine dehydratase of Bacillus licheniformis. II. Regulation during development (151) 461
LeMahieu, M. A., see Nicolette, J. A. (166) 403
Lemberg, R. and Gilmour, M. V.
Cryptoporphyrin and porphyrin a from pigeon-breast muscle (156) 407
Lemberg, R., see Nichol, A. W. (158) 165
Leng, M. et Michelson, A. M.
Polynucléotides. XI. Etude de la stabilité conformationelle de polynucléotides en fonction de la température (155) 91
Leng, M., Pochon, F. et Michelson, A. M.
Photochimie des polynucléotides. II. Etude de la luminescence à température ordinaire de mononucléotides et dinucléotides (169) 338
Leng, M., see Pochon, F. (169) 350
Lengyel, P., see Klein, A. (169) 543
Lenherr, A. D. and Ormerod, M. G.
Formation of the thymine radical in irradiated DNA (166) 298
Lenk, W., see Von Jagow, R. (158) 45
Lerman, S., see Zigman, S. (154) 423
Leslie, J., see Franklin, J. G. (160) 333
Leslie, R. B., see Baskin, L. S. (159) 509
Lesslauer, W., Slotboom, A. J., Postema, N. M., De Haas, G. H. and Van Deenen, L. L. M.
Effects of phospholipase A and pre-phospholipase A on black phospholipid membranes (150) 306
Leterrier, F., Balny, C. et Douzou, P.
Formation de complexes entre la p-benzosémiquinone et l'imidazole et ses dérivés (154) 444
Letnansky, K.
Strain variations in the utilization of hexoses by Ehrlich ascites tumor cells (165) 364
Leutz, J. C., see Bole, G. G., Jr. (156) 217
Levitan, I. B. and Webb, T. E.
Modified induction of hepatic tyrosine transaminase in 8-azaguanine-treated rats (155) 632
Levitzki, A., see Yariv, J. (165) 303
Levy, H. B., see Carter, W. A. (155) 437
Lévy, M., see Huet, C. (150) 521
Levy, R. I., see Greten, H. (164) 185
Lewin, L. M., see Shafai, T. (152) 787
Li, C. H., Dixon, J. S. and Chung, D.
Human pituitary growth hormone. XVIII. The amino acid sequence in the proline-rich region of residue No. 75 (160) 472
Li, C. H., see Bewley, T. A. (154) 420
Li, C. H., see Gan, J. (170) 189
Li, S. C., see Cahill, C. L. (168) 367
Li, Y.-T., see Cahill, C. L. (154) 40
Liang, C. R. and Rosenberg, H.
The biosynthesis of the carbon-phosphorus bond in Tetrahymena (156) 437
Liao, T.-H., see Ratwitch, A. B. (160) 360
Liau, M. C., Craig, N. C. and Perry, R. P.
The production of ribosomal RNA from high molecular weight precursors. I. Factors which influence the ability of isolate nucleoli to process 45-S RNA (169) 196
Liberman, E. A. and Topaly, V. P.
Selective transport of ions through bimolecular phospholipid membranes (163) 125
Liener, I. E., see Takahashi, T. (154) 560
Limbeck, G. A., see Igo, R. P. (151) 88
Lin, C. C., see Chen, C. (170) 366
Lin, F. H. and Rich, M. A.
RNA polymerase activity following infection with murine leukemia virus (157) 310
Lindahl, U.
Glucuronic acid-and glucosamine-containing oligosaccharides from the heparin-protein linkage region (156) 203
Lindemann, B.
Na^+ and Ca^{2+} dependence of threshold potential in frog skin excitation (163) 424
Lindenmann, J., see Cummins, D. L. (160) 396
Linder, C., see Migliorini, R. H. (158) 160
Lindlau, M., see Dahm, K. (159) 377
Lindstedt, G., Lindstedt, S., Olander, B. and Tofft, M.
α-Ketoglutarate and hydroxylation of γ-butyrobetaine (158) 503
Lindstedt, S., see Lindstedt, G. (158) 503
Linker, A. and Hovingh, P.
The enzymatic degradation of heparitin sulfate. II. Isolation and characterization of non-sulfated oligosaccharides (165) 89
Linker, A., see Coulson, W. F. (158) 117
Linnane, A. W., see Lamb, A. J. (161) 415
Linnane, A. W., see Proudlock, J. W. (152) 434
Lion, M. B.
Search for a mechanism for the increased sensitivity of 5-bromouracil-substituted DNA to ultraviolet radiation (155) 505
Lionetti, F. J., see Forstner, J. F. (158) 317
Lipiński, B., see Lukasiewicz, H. (159) 503
Lippel, K. and Mead J. F.
Alpha-oxidation of 2-hydroxystearic acid in vitro (152) 669

Lipson, M. J. and Silbert, J. E.
Glycosaminoglycans of adult frog back skin (158) 344
Lisker, R., see Jones, R. T. (154) 488
Lisowska-Bernstein, B., see Walsh, J. A. (168) 64
Lissitzky, S., see Valenta, L. (168) 507
Liu, A. Y. and Neuhaus, O. W.
Injury and plasma protein biosynthesis. II. Hepatic microsomal activity and polysomal organization (166) 195
Lobareva, L. S., see Stepanov, V. M. (151) 719
Locascio, G., see Tigier, H. A. (151) 300
Locke, W., see McAfee, R. D. (150) 131
Locquet, J.-P., Saint-Blancard, J. and Jollès, P.
Apparent affinity constants of lysozymes from different origins for Micrococcus lysodeikticus cells (167) 150
Loeb, J. E.
Gel filtration of deoxyribonucleoprotein on agarose (157) 424
Loeb, J. N. and Hubby, B. G.
Amino acid incorporation by isolated mitochondria in the presence of cycloheximide (166) 745
Loerch, J. D., see Vidra, J. D. (159) 551
Loewenstein, W. R., see Payton, B. W. (150) 156
Lofrumento, N. E., see Papa, S. (153) 306
Löhr, G. W., see Blume, K. G. (151) 686
Lombardi, B., see Schlunk, F. F. (158) 425
London, C. D., Diamond, J. M. and Brooks, F. P.
Electrical potential differences in the biliary tree (150) 509
London, Y., see Klibansky, C. (150) 15
Long, J. L., see Baker, R. D. (150) 649
Longnecker, D. S., see Schlunk, F. F. (158) 425
Longworth, J. W., see Knopp, J. A. (154) 436
Lord, M. J. and Merrett, M. J.
Glycollate oxidase in Chlorella pyrenoidosa (159) 543
Lorkin, P. A., see Marengo-Rowe, A. J. (168) 58
Lornitzo, A. and Goldman, D. S.
Intracellular localization of a 6-O-methyl-D-glucose containing soluble polysaccharide from Mycobacterium tuberculosis (158) 329
Losada, M., see Paneque, A. (162) 149
Loshkareva, N. P., see Gause, Jr., G. G. (166) 752
Lotlikar, P. D.
Enzymatic N-O-methylation of hydroxamic acids (170) 468
Loughlin, R. E., see Henderson, R. J. (156) 195
Louisot, P., Colobert, L., Bollack, C., Weil, J. H. et Ebel, J.-P.
Inhibition de la multiplication virale à l'aide d'acides ribonucléiques chimiquement modifiés. I. Inhibition de la multiplication de Myxovirus parainfluenzai I (virus Sendai) sur cellules de rein de veau (155) 38
Louisot, P., see Got, R. (157) 599
Lowe, A. G., see Atkinson, A. (167) 469
Lowe, D. A. and Turner, J. M.
Enzymic oxidation of D-1-aminopropan-2-ol by diol dehydrogenases of microbial origin (170) 455
Lowenstein, L. M., Hummeler, K., Smith, I. and Segal, S.
The effect of storage at 4° on amino acid transport by rat kidney cortex slices (150) 416
Lowenstein, L. M., Smith, I. and Segal, S.
Amino acid transport in the rat renal papilla (150) 73
Lowy, J., see Pasqualini, J. R. (152) 648
Lowy, P. H. and Keighley, G.
Inactivation of erythropoietin by Koshland's tryptophan reagent and by membrane filtration (160) 413
Luck, G. and Zimmer, Ch.
Comparative study of ultraviolet rotatory dispersion of DNA's from various sources at neutral and acidic pH (169) 466
Luck, G., Zimmer, Ch. and Snatzke, G.
Circular dichroism of protonated DNA (169) 548
Lukasiewicz, H., Niewiarowski, S., Worowski, K. and Lipiński, B.
The plasmin inhibition by synthetic antifibrinolytic agents in relation to the type of substrate (159) 503
Lundberg, B., see Sörbo, B. (157) 445
Lundblad, A.
Isolation and characterization of a urinary oligosaccharide characteristic of blood group O(H)-secretors (165) 202
Lundholm, U. I., see Williams, H. E. (158) 465
Lunt, G. G. and Rowe, C. E.
The production of unesterified fatty acid in brain (152) 681
Lünzmann, G. and Schram, G.
Synthesis of α- and β-9-D-arabinofuranosyladenine by phenylpolyphosphate (169) 263
Lurie, D., see Getz, G. S. (152) 325
Lüscher, E. F., see Davey, M. G. (165) 490
Lustig, A., see Kalb, A. J. (168) 366
Lüthi, L., see Rous, S. (152) 454
Lüthi, L., see Rous, S. (152) 462
Lüttge, U., Bauer, K. und Köhler, D.
Frühwirkungen von Gibberellinsäure auf Membrantransport in jungen Erbsenpflanzen (150) 452
Lyman, R. L., Hopkins, S. M., Sheehan, G. and Tinoco, J.
Effects of estradiol and testosterone on the incorporation and distribution of [Me-^{14}C]-methionine methyl in rat liver lecithins (152) 197
Lyman, R. L., see Hopkins, S. M. (164) 272
Lyman, R. L., see Tinoco, J. (164) 129
Lyon, Jr., G. M.
Pyrimidine deoxyribonucleoside phosphorylase. I. Substrate inhibition by thymine (159) 38
Lyon, I.
Studies on transmural potentials in vitro in relation to intestinal absorption. V. Kinetic characteristics of lipid interactions with rat gut (163) 75
Lyttleton, J. W.
Protein constituents of plant ribosomes (154) 145

M

Ma, P. F. and Fisher, J. R.
Two different hepatic adenosine deaminases in the chicken (159) 153
McAfee, R. D. and Locke, W.
Effect of a lipid extract of frog skin on short-circuit current and sodium transport of isolated frog skin (150) 131
McAuslan, B. R., see Ohta, N. (158) 98
McCalla, D. R.
Reaction of N-methyl-N'-nitro-N-nitroguanidine and N-methyl-N-nitroso-p-toluenesulfonamide with DNA in vitro (155) 114
McCaman, R. E., see Goldberg, A. M. (167) 186
McCarthy, C. and Nester, E. W.
Inactivation of transforming DNA by tritium disintegrations in vivo (166) 249
McCarthy, R. D., see Kinsella, J. E. (164) 518
McCarthy, R. D., see Kinsella, J. E. (164) 530
McCarty, K. S., see Sy, J. (166) 571
Macchia, V. and Pastan, I.
Effect of sphingomyelinase from Clostridium perfringens on the metabolic activity and phospholipid composition of thyroid slices (152) 704
McClain, P. E., Pearson, A. M., Miller, E. R. and Dugan, Jr., L. R.
Application of differential thermal analysis to the study of hydrothermal shrinkage in epimysial and corium collagen (168) 143
McConnell, D. G., see Brierley, G. P. (163) 117
McCormick, D. B., see Koster, J. F. (153) 724
McCormick, D. B., see Visser, J. (159) 257
McCoy, A. R., see George, J. M. (170) 213
McCroskey, R. P., see Abbott, M. T. (169) 1
McCubbin, W. D. and Kay, C. M.
The subunit structure of fibrous muscle proteins as determined by osmometry (154) 239
McCubbin, W. D., see Oikawa, K. (168) 164
McDermott, J. A., Huber, C. T., Osaki, S. and Frieden, E.
Role of iron in the oxidase activity of ceruloplasmin (151) 541
MacDonald, R. E., see Laue, P(165) 410
McDonald, R. K., see Lande, S. (154) 420
Macey, R. I., see Fishman, H. M. (150) 482
Macey, R. I., see Kepner, G. R. (163) 188
Macey, R. I., see Winocur, B. A. (150) 32
McFadden, B. A., see Tani, T. (161) 309
McGarry, J. D.
A comparative study of the reversibility of the reaction catalysed by bacterial lipoamide dehydrogenase (159) 9
McGavack, T. H., see Kao, K- Y. T. (151) 568
McGuire, W. L. and O'Malley, B. W.
RNA polymerase activity of the chick oviduct during steroid-induced synthesis of a specific protein (157) 187
McIntosh, D. J., see Tinoco, J. (164) 129
McIntosh, J. R., see Rosenberg, S. A. (163) 285
McKean, C. M., see Raghupathy, E. (161) 575
McKean, C. M., see Shah, S. N. (164) 604
McKenzie, H. A., see Bell, K. (154) 284
Macknight, A. D. C.
Water and electrolyte contents of rat renal cortical slices incubated in potassium-free media and media containing ouabain (150) 263
Macknight, A. D. C.
The extracellular space in rat renal cortical slices incubated at 0.5° and 25° (163) 85
Macknight, A. D. C.
Water and electrolyte contents of rat renal cortical slices incubated in medium containing p-chloromercuribenzoic acid or p-chloromercuribenzoic acid and ouabain (163) 500
Macknight, A. D. C.
Regulation of cellular volume during anaerobic incubation of rat renal cortical slices (163) 557
McLean, P., see Gumaa, K. A. (158) 300
McManus, I. R., see Cohn, M. L. (159) 182
McQuade, A. B. and Crewther, W. G.
Peptide substrates for a proteinase of Clostridium histolyticum (167) 619
Madoñ, J., see Hierowski, M. (170) 425
Maeda, H., Koyanagi, T. and Ishida, N.
C-terminal amino acid of neocarzinostatin (160) 249
Maeda, H., see Ono, Y. (155) 616
Maeda, Y., see Kito, Y. (154) 352
Magee, P. N., see Lawley, P. D. (157) 646
Mager, J., see Zahavi, M. (153) 787
Maggio, R., see Ceccarini, C. (166) 134
Magid, E.
The dehydration kinetics of human erythrocytic carbonic anhydrases B and C (151) 236
Magid, E. and Turbeck, B. O.
The rates of the spontaneous hydration of CO_2 and the reciprocal reaction in neutral aqueous solutions between o° and 38° (165) 515
Mahler, H. R., see Cotman, C. (163) 272
Mahoney, C. P., see Igo, R. P. (151) 88
Maio, J. J., see Schildkraut, C. L. (161) 76
Malathi, P. and Crane, R. K.
Spatial relationship between intestinal disaccharidases and the active transport system for sugars (163) 275
Malcolm, N. L.
A temperature-induced lesion in amino acid-transfer RNA attachment in a psychrophile (157) 493
Malenge, J. P., see Bonaly, R. (164) 306
Malkin, S.
Analysis of the "weak light effect" on the fluorescence yield in isolated chloroplasts (153) 188
Malkin, S.
Kinetic studies on electron-transport components in isolated choroplasts. I. The effect of the pool of electron carriers between the two photosystems on P_{700} changes (162) 392
Malkin, S. and Jones, L. W.
Photoinhibition and excitation quenching in Photosystem II of photosynthesis, from fluorescence induction measurements (162) 297
Malmström, B. G., Reinhammer, B. and Vänngard, T.
Two forms of copper (II) in fungal laccase (156) 67

Malmström, B. G., see Fee, J. A. (153) 299
Malneva, G. V., see Belitser, V. A. (154) 367
Mal'tsev, N. I., see Stepanov, V. M. (151) 719
Malviya, A. N., Nicholls, P. and Elliott, W. B.
Steady-state changes in loosely coupled submitochondrial particles induced by ADP and uncouplers (153) 920
Malviya, A. N., Parsa, B., Yodaiken, R. E. and Elliott, W. B.
Ultrastructure of sonic and digitonin fragments from beef heart mitochondria (162) 195
Manabe, M., see Hirano, S. (156) 213
Manalaysay, A. S. and Hines, M. C.
Carboxyl-terminal amino acids or rabbit lens γ-crystallin (168) 383
Manchester, K. L., see Kouvelas, E. D. (164) 132
Mancuso, S., see Reynolds, J. W. (152) 438
Mandel, H. G., see Connamacher, R. H. (166) 475
Mandel, P., see Chambon, P. (157) 504
Mandel, P., see Chambon, P. (157) 520
Mandel, P., see Quirin-Stricker, C. (159) 75
Mandel, P., see Samec, J. (161) 377
Mandersloot, J. G., see De Gier, J. (150) 666
Mangalo, R., Bizzini, B., Turpin, A. and Raynaud, M.
The molecular weight of tetanus toxin (168) 583
Mangold, H. K. and Sand, D. M.
The stability of ^{14}C-labelled fatty acids during prolonged storage (164) 124
Manil, J., see Baker, P. F. (150) 328
Manion, R., see Marshall, W. E. (151) 414
Manitius, A., Bensch, K. and Epstein, F. H.
(Na$^+$-K$^+$)-activated ATPase in kidney cell membranes of normal and methylprednisolone-treated rats (150) 563
Manley, G., see Mullinger, R. N. (170) 282
Mann, K. G. and Vestling, C. S.
Nature of the isozymes of rat liver mitochondrial malate dehydrogenase (159) 567
Manning, T. J., see Greengard, P. (156) 198
Mano, Y., see Nagano, H. (157) 546
Mansour, T. E., see Holmes, P. A. (156) 266
Mansour, T. E., see Holmes, P. A. (156) 275
Mao, J. C.-H. and Wiegand, R. G.
Mode of action of macrolides (157) 404
Maor, D. and Alexander, P.
Changes in ribonuclease activity in rat liver following hepatectomy (157) 627
Marcel, Y. L., Christiansen, K. and Holman, R. T.
The preferred metabolic pathway from linoleic acid to arachidonic acid in vitro (164) 25
Marchetti, M., see Botré, C. (154) 360
Marchetti, M., see Caldarera, C. M. (161) 156
Marchetti, M., see Pasquali, P. (158) 482
Marchetti, M., see Pasquali, P. (165) 561
Marchok, A. C. and Wolff, J. A.
Studies of muscle development. IV. Some characteristics of RNA polymerase activity in isolated nuclei from developing chick muscle (155) 378
Marcus, F.
Desensitization of kidney fructose-1,6-diphosphatase by acetic anhydride (151) 315
Marcus, L., see Oppenheim, J. (161) 386
Marechal, L. R., see Torres, H. N. (156) 206
Marengo-Rowe, A. J., Lorkin, P. A., Gallo, E. and Lehmann, H.
Haemoglobin (Dhofar) – a new variant from Southern Arabia (168) 58
Margolis, R. K. and Lajtha, A.
Ion dependence of amino acid uptake in brain slices (163) 374
Maria, H. J., see Brill, A. S. (154) 342
Maričić, S. and Rumen, N. M.
Proton magnetic relaxation in solution of lamprey hemoglobins (154) 496
Marini, M. A. and Martin, C. J.
Prototropic equilibrium of the reaction of diisopropylphosphofluoridate with α-chymotrypsin (168) 73
Markley, K., see Delluva, A. M. (151) 646
Maroc, J., De Klerk, H. and Kamen, M. D.
Quinones of Athiorhodaceae (162) 621
Maroudas, N. G. and Wilkie, D.
Ultraviolet irradiation studies on the cytoplasmic determinant of the yeast mitochondrion (166) 681
Marrè, E., see Lado, P. (157) 140
Marriott, J. and Perkins, D. J.
Relationships between the copper atoms of caeruloplasmin. III. A difference in the reactivity of the chromophoric sites (154) 501
Marshall, K. C.
Interaction between colloidal montmorillonite and cells of Rhizobium species with different ionogenic surfaces (156) 179
Marshall, L. B., see Bornstein, J. (156) 31
Marshall, R. D., see Blacklow, R. S. (165) 179
Marshall, W. E., Manion, R. and Porath, J.
A non-discriminating proteinase of Penicillium notatum. Partial purification and specificity (151) 414
Mårtensson, E., see Karlsson, K.-A. (152) 230
Mårtensson, E., see Stoffyn, A. (152) 353
Martin, C. J., see Marini, M. A. (168) 73
Martin, D. G., see Davies, H. E. F. (150) 315
Martin, D. G., see Kirchberger, M. A. (165) 22
Martin, F. D., see Colby, Jr., C. (157) 159
Martin, I. F., see Cheniae, G. M. (153) 819
Martin, V., see Steinbuch, M. (154) 228
Martinez, B., see Busch, E. W. (166) 547
Martonosi, A.
The effect of phospholipase C on surviving muscle preparations (150) 309
Martonosi, A.
Sarcoplasmic reticulum. V. The structure of sarcoplasmic reticulum membranes (150) 694
Marzotto, A., Pajetta, P., Galzigna, L. and Scoffone, E.
Reversible acetoacetylation of amino groups in proteins (154) 450
Marzotto, A., see Jori, G. (154) 1
Masiak, S. J. and Green, J. W.
Relationship of Na$^+$, K$^+$ and Mg-ATP binding sites for the human erythrocyte stromal (Na$^+$ + K$^+$)-dependent ATPase (159) 340
Masopust, J., see Kithier, K. (160) 135
Mass, M., see Wiener, S. L. (166) 229
Massini, P. and Voorn, G.
Optical and photochemical properties of chlorophyll a solubilized in aqueous solutions of surfactants (153) 589
Masters, C. J.
The ontogeny of mammalian fructose-1,6-diphosphate aldolase (167) 161
Masters, C. J., see Fieldhouse, B. (151) 535
Masters, C. J., see Holmes, R. S. (151) 147
Masters, C. J., see Holmes, R. S. (159) 81
Mathews, C.K., see Klein, A. (169) 543
Mathews, M. B. and Decker, L.
The distribution of sulfate groups in chondroitin sulfate chains. Detection of "oversulfated" and "undersulfated" repeating periods (156) 419

Mathewson, J. H., see Meyer, T. E. (153) 854
Mathias, A. P., see Barlow, J. J. (166) 379
Matoba, R., see Suzuki, S. (167) 641
Matsubara, A., see Abood, L. G. (163) 539
Matsubara, A., see Yamauchi, A. (150) 181
Matsuda, I., see Sugai, M. (170) 474
Matsuda, M., see Betterton, H. (170) 459
Matsuda, T., Hata, F. and Yoshida, H.
Stimulatory effect of Na^+ and ATP on the release of acetylcholine from synaptic vesicles (150) 739
Matsuhisa, T., see Higashi, K. (166) 388
Matsui, H. and Schwartz, A.
Mechanism of cardiac glycoside inhibition of the (Na^+-K^+)-dependent ATPase from cardiac tissue (151) 655
Matsushita, S. and Raacke, I. D.
Purification of nucleoside triphosphatases from pea seedling ribosomes (166) 707
Mattoon, J. R., see Balcavage, W. X. (153) 521
Mattoon, J. R., see Balcavage, W. X., (162) 525
Matty, A. J. and Deutsch, K
The effect of ^2H_2O on the membranous structures of the proximal and distal convoluted tubules of the mouse (163) 14
Mauzerall, D., see Burr, A. (153) 614
May, B. K. and Elliott, W. H.
Characteristics of extracellular protease formation by Bacillus subtilis and its control by amino acid repression (157) 607
May, B. K. and Elliott, W. H.
Selective inhibition of extracellular enzyme synthesis by removal of cell wall from Bacillus subtilis (166) 532
May, B. K., Walsh, R. L., Elliott, W. H. and Smeaton, J. R.
Mechanism of the paradoxical stimulation of ribonuclease synthesis in Bacillus subtilis by actinomycin D (169) 260
Mayne, R., see Leake, R. E. (157) 198
Mayo, V. S., Andrean, B. A. G. and De Kloet, S. R.
Effects of cycloheximide and 5-fluorouracil on the synthesis of ribonucleic acid in yeast (169) 297
Mazliak, P., Stoll, U. et Ben Abdelkader, A.
Coopération entre les mitochondries et le reste de la cellule pour le renouvellement des lipides mitochondriaux du parenchyme de pomme (152) 414
Mazza, G., Charles, C., Bouchet, M. Ricard, J. et Raynaud, J.
Isolement, purification et propriétés physicochimiques des peroxydase de navet (167) 89
Mead, J. F., see Lippel K. (152) 669
Mead, J. F., see Pande, S. V. (152) 636
Mehl, E. and Jatzkewitz, H.
Cerebroside 3-sulfate as a physiological substrate of arylsulfatase (151) 619
Mehl, E., see Thorun, W. (160) 132
Mehta, S. L., Hadziyev, D. and Zalik, S.
Chloroplast and cytoplasmic polysomes and ribosomal RNA from wheat (169) 381
Meigs, R. A. and Ryan, K. J.
Cytochrome P-450 and steroid biosynthesis in the human placenta (165) 476
Meilman, E., see Wiener, S. L. (166) 229
Mela, M. J.
Elastic-mathematical theory of cells and mitochondria in swelling process. V. Transformation of cortical granule membrane of egg cell of Strongylocentrotus purpuratus in subelastic and elastic swelling (150) 541
Mela, M. J.
Elastic-mathematical theory of cells and mitochondria in swelling process. VI. Ultrastructure of membrane region in the egg cell of the sea urchin (Strongylocentrotus purpuratus) in subelastic and elastic swelling (150) 553
Melnikova, N. L., see Kafiani, C. A. (169) 274
Melzer, M. S., see Rhaese, H.-J. (155) 491
Ménaché, D., see Aronson, D. L. (167) 378
Mercola, D. A., see Morris, J. W. S. (160) 145
Merrett, M. J., see Lord, M. J. (159) 543
Meshorer, E., see Efron, M. L. (165) 238
Mesrob, B., Petrova, M. and Ivanov, Ch.
Fractionation of hordein by gel filtration (160) 122
Metzenberg, R. L., see Jacobson, E. S. (156) 140
Meyer, E. W., see Catsimpoolas, N. (168) 122
Meyer, T. E., Bartsch, R. G., Cusanovich, M. A. and Mathewson, J. H.
The cytochromes of Chlorobium thiosulfatophilum (153) 854
Miall, S. H. and Walker, I. O.
Circular dichroism of Escherichia coli ribosomes and tobacco mosaic virus (166) 711
Mian, A. M., see Brammer, K. W. (166) 732
Michelson, A. M. and Monny, C.
Polynucleotide analogues. XIII. Action of ribonuclease T_1 and of polynucleotide phosphorylase on various analogues (166) 294
Michelson, A. M., see Leng, M. (155) 91
Michelson, A. M., see Leng, M. (169) 338
Michelson, A. M., see Pochon, F. (169) 350
Michelson, E. L. and Suyama, Y.
Evidence for two types of 18-S ribosomal RNA in Neurospora crassa (157) 200
Michel-Wolwertz, M. R., see Brown, J. S. (153) 288
Mickelson, J. C., see Tischer, R. G. (156) 403
Middelhoven, W. L.
The derepression of arginase and of ornithine transaminase in nitrogen-starved baker's yeast (156) 440
Migliorini, R. H., Linder, C. and Camargo, A. C. M.
Effects of peptides with oxytocic activity on the metabolism of glucose by adipose tissue (158) 160
Miki, N., see Yoshida, H. (158) 489
Mikolajczak, K. L. and Smith, Jr., C. R.
Penta-acid triglycerides of Chamaepeuce afra seed oil (152) 244
Millar, D. B.
The interaction of mercurials with helical and random polyribouridylic acid (166) 628
Miller, A. O. A.
Etude par sédimentation en gradient de sucrose de la ferritine marquée au ^{59}Fe, extraite de cellules de HeLa (155) 262
Miller, E. R., see McClain, P. E. (168) 143
Miller, G. W., see Hsu, W. P. (151) 711
Miller, J. E., see Rytter, D. (152) 418
Miller, O. N., see Strickland, J. E. (159) 221
Miller, R. J., Pinkham, C., Overman, A. R. and Dumford, S. W.
Temperature effects on the acid hydrolysis of glycose 1-phosphate and urease hydrolysis of urea (167) 607
Miller, S. A. and Tannenbaum, S. R.
The metabolism in vivo of [2-Me-^{14}C]2,4-dimethylheptanoic acid (152) 511
Miller, W. G., see Jones, D. D. (159) 411
Millet, J. et Acher, R.
Spécificité "hydrophobique" d'une endo-

peptidase isolée de Bacillus megaterium (151) 302

Mills, S. E., see Delmer, D. P. (167) 431

Mills, T. M. and Spaziani, E.
The influence of testosterone on penetration of α-aminoisobutyric acid and 2-deoxyglucose in male rat sex accessory tissues (150) 435

Milman, L. S., see Yurowitzki, Yu. G. (151) 270

Milner, R. D. G. and Hales, C. N.
Cations and the secretion of insulin (150) 165

Minohara, A., see Arakawa, K. (168) 106

Mirzabekov, A. D., Grünberger, D. and Bayev, A. A.
Binding of valine tRNA$_1$ fragments to 70-S, 50-S and 30-S ribosomal particles (166) 68

Mirzabekov, A. D., Grünberger, D., Krutilina, A. I., Holý, A., Bayev, A. A. and Šorm, F.
Different anticodons in purified valine tRNA fractions from yeast (166) 75

Mitchell, W. M.
Pseudocollagenase: A protease from Clostridium histolyticum (159) 554

Mitchen, J. L., see Yatvin, M. B. (169) 536

Mitra, S. and Basu, S.
Some biophysical properties of a vibriophage and its DNA (155) 143

Miura, T. and Mizushima, S.
Separation by density centrifugation of two types of membranes from spheroplast membrane of Escherichia coli K12 (150) 159

Miyazaki, N., see Hirano, S. (156) 213

Miyazawa, F., Dick, V. C. and Tamaoki, T.
Reversible dissociation of Escherichia coli ribosomes by nitrogen mustard (155) 193

Miyazawa, F., see Tamaoki, T. (157) 655

Mizuhara, S., see Ubuka, T. (158) 493

Mizuno, D., see Goto, S. (166) 663

Mizuno, D., see Obinata, M. (155) 98

Mizuno, N., Nagano, K., Nakao, T., Tashima, Y., Fujita, M. and Nakao, M.
Approximation of molecular weight of (Na^+-K^+)-ATPase (168) 311

Mizuno, N. S., Hof, H. and Collin, M. V.
RNA fractions in normal rat liver and Morris 5123D hepatoma (166) 656

Mizuno, S., Yamazaki, H., Nitta, K. and Umezawa, H.
Inhibition of DNA-dependent RNA polymerase reaction of Escherichia coli by an antimicrobial antibiotic streptovaricin (157) 322

Mizushima, S., see Miura, T. (150) 159

Mohri, T., Oyashiki, T., Furuno, I. and Kitagawa, H.
The activation by leucine of ouabain-sensitive ATPase of HeLa cells (150) 537

Moldave, K., see Schneir, M. (166) 58

Molinary, S. V., Cribbs, R. M. and Kline, E. S.
Lactate utilization by a strain of human somatic cells (158) 177

Møller, J. V., see Sheikh, M. I. (158) 456

Mommaerts, W. F. H. M., see Seraydarian, K. (162) 424

Mommaerts, W. F. H. M., see Vegh, K. (163) 266

Momparler, R. L., Chu, M. Y. and Fischer, G. A.
Studies on a new mechanism of resistance of L 5178Y murine leukemia cells to cytosine arabinoside (161) 481

Momparler, R. L., see Krygier, V. (161) 578

Monder, C.
Studies on the reaction of cytochrome c with corticosteroids (164) 369

Monny, C., see Michelson, A. M. (166) 294

Montgomery, M. W., Norgaard, M. J. and Veerabhadrappa, P. S.
Purification and substrate and inhibitor specificities of carboxylesterases of the pea (Pisum sativum L.) (167) 567

Montgomery, M. W., see Norgaard, M. J. (151) 587

Moog, F., see Etzler, M. E. (154) 150

Moores, R. R., see Kleihauer, E. F. (154) 220

Morel, F., see Jard, S. (150) 124

Morell, D. B., see Nichol, A. W. (156) 97

Morell, D. B., see Nichol, A. W. (158) 226

Morenkova, S. A., see Konikova, A. S. (168) 252

Moret, V., see Pinna, L. A. (153) 494

Moret, V., see Pinna, L. A. (159) 563

Morgan, E. H.
Plasma protein turnover and transmission to the milk in the rat (154) 478

Morgan, H. E., see Wood, R. E. (163) 171

Morgan, R. G. H., Barrowman, J., Filipek-Wender, H. and Borgström, B.
The lipolytic enzymes of rat pancreatic juice (167) 355

Morikawa, Y., see Tamao, Y. (151) 260

Morimoto, H., see Uenoyama, H. (160) 159

Morisawa, S. and Chargaff, E.
On the bias of the distribution of the 2'-O-methylribonucleotide constituents of yeast transfer RNA (169) 285

Morishima, I., see Himeno, M. (167) 575

Morita, S.
Evidence for three photochemical systems in Chromatium D (153) 241

Moroder, L., see Tamburro, A. M. (154) 583

Morowitz, H. J., see Engelman, D. M. (150) 376

Morowitz, H. J., see Engelman, D. M. (150) 385

Morreal, C. E., Dao, T. L., Eskins, K., King, C. L. and Dienstag, J.
Peroxide induced binding of hydrocarbons to DNA (169) 224

Morris, I.
Inhibition of spinach chloroplast fructose-1,6-diphosphatase by $MgATP^{2-}$, $MgADP^-$, and magnesium pyrophosphate $(MgP_2O_7^{2-})$ (162) 462

Morris, I., see Ahmed, J. (162) 32

Morris, I., see Bassham, J. A. (153) 898

Morris, J. A., see Kennedy, I. R. (153) 777

Morris, J. W. S., Mercola, D. A. and Arquilla, E. R.
An analysis of the near ultraviolet circular dichroism of insulin (160) 145

Morris, L. J., see Howling, D. (152) 224

Morrison, K., see Spitzer, H. L. (152) 552

Morse, Jr., P. A., see Coward, J. E. (155) 605

Mortenson, L. E., see Kennedy, I. R. (153) 777

Moruzzi, M. S., see Caldarera, C. M. (161) 156

Moss, D. W., Eaton, R. H. and Scutt, P. B.
An estimate of the catalytic-centre activity and purity of human alkaline phosphatase preparations (154) 609

Motai, H., Ichishima, E. and Yoshida, F.
Physical and chemical properties of lipase from Torulopsis ernobii (154) 586

Motulsky, A. G., see Jones, R. T. (154) 278

Muellenberg, C. G., see O'Brien, P. J. (158) 189

Muellenberg, C. G., see O'Brien, P. J. (167) 268

Mueller, G. C., see Friedman, D. L. (161) 455

Mueller, G. C., see Nicolette, J. A. (166) 403

Mueller, G. C., see Summers, W. P. (169) 316

Mühlrad, A.
Studies on the properties of chemically modified actin. II. Trinitrophenylation (162) 444

Mühlrad, A., Corsi, A. and Granata, A. L.
Studies on the properties of chemically

modified actin. I. Photooxidation, succinylation, nitration (162) 435
Mühlrad, A., see Fábián, F. (162) 596
Mukasa, H., Kajiyama, S., Sugiyama, K., Funakubo, K., Itoh, M., Nosoh, Y. and Sato, T.
The subunit structure of porcine ceruloplasmin (168) 132
Mukasa, H., Nosoh, Y. and Sato, T.
Reversible dissociation of porcine ceruloplasmin into subunits (168) 483
Mukherjee, S. and Bhose, A.
Studies on estrogen regulation of cholesterol biosynthesis in rat liver microsomes (164) 357
Mukerji, S. K. and Ting, I. P.
Malate dehydrogenase(decarboxylating) (NADP) isoezymes of Opuntia stem tissue: Mitochondrial, chloroplast, and soluble forms (167) 239
Mukoyama, K., see Saito, K. (164) 596
Müller, G. und Nielsen, G.
Radiometrie elektronenmikroskopischer Präparate (165) 544
Müller, H., see Witt, I. (170) 216
Müller, M., see Kramar, R. (162) 289
Mullinger, R. N. and Manley, G.
The preparation and properties of a glycoprotein from pigs' blood platelets (170) 282
Mumma, R. O.
Ascorbic acid sulfate as a sulfating agent (165) 571
Munch-Petersen, A.
Thymineless mutants of Escherichia coli with deficiencies in deoxyribomutase and deoxyriboaldolase (161) 279
Munck, B. G.
Amino acid transport by the small intestine of the rat. Effects of glucose on transintestinal transport of proline and valine (150) 82
Munck, B. G.
Amino acid transport by the small intestine of the rat. Evidence against interactions between sugars and amino acids at the carrier level (156) 192
Munday, K. A., Ansari, A. Q., Oldroyd, D. and Akhtar, M.
Oestrogen-induced calcium-binding protein in Xenopus laevis (166) 748
Munoz, E., Freer, J. H., Ellar, D. J. and Salton, M. R. J.
Membrane-associated ATPase activity from Micrococcus lysodeikticus (150) 531
Munro, H. N., see Jacob, S. T. (157) 421
Munro, H. N., see Pronczuk, A. W. (157) 204
Muramatsu, K., see Cooper, W. K. (169) 269
Muramatsu, M. and Fujisawa, T.
Methylation of ribosomal RNA precursor and tRNA in rat liver (157) 476
Muramatsu, M., see Fujisawa, T. (169) 175
Muramatsu, T., see Fukuda, M. (159) 215
Murao, K., see Ikehara, M. (155) 82
Muraoka, S. and Slater, E. C.
The effect of deuterium oxide on respiratory-chain phosphorylation in sub-mitochondrial particles (162) 170
Murata, N.
Fluorescence of chlorophyll in photosynthetic systems. IV. Induction of various emissions at low temperatures (162) 106
Murdaugh, H. V., see Ciccone, J. R. (163) 108
Mürer, E. H.
Release reaction and energy metabolism in blood platelets with special reference to the burst in oxygen uptake (162) 320
Murthy, M. R. V.
Kinetic aspects of ribosomal and messenger RNA formation in young rat brain (166) 115
Murty, C. N. and Hallinan, T.
RNA turnover in free and endoplasmic reticulum-bound ribosomes from rat liver (157) 414
Mushynski, W. E., see Černý, R. (169) 439
Muszbek, L., Damjanovich, S. and Csaba, B.
The effect of ^{60}Co γ - irradiation on the tryptic digestion of phosphorylase b (167) 464
Myer, Y. P.
Far ultraviolet circular dichroism spectra of cytochrome c (154) 84

N

Nacasch, C., see Vilkas, E. (158) 147
Nagai, K., see Yoshida, H. (150) 162
Nagai, Y., Elleway, R. F. and Nicholas, D. J. D.
Some properties of an NADH-benzyl viologen reductase from Azotobacter vinelandii (153) 766
Nagano, H. and Mano, Y.
Thymidine kinase, thymidylate kinase and $^{32}P_i$ and [^{14}C] thymidine incorporation into DNA during early embryogenesis of the sea urchin (157) 546
Nagano, K., see Mizuno, N. (168) 311
Nagao, M., see Sugimura, T. (170) 427
Nägel, L., see Schäfer, G. (162) 617
Nagel, R., see Fischer, S. (169) 566
Nagel, R. L., see Bemski, G. (154) 592
Nagel, R. L., see Ranney, H. M. (160) 112
Nagley, P. and Hallinan, T.
The use of radioactive choline as a label for microsomal membranes. I. Selectivity of label for endoplasmic reticulum and specificity for lecithin (163) 218
Nakagawa, Y., see Yoshida, H. (150) 162
Nakamaru, Y. and Konishi, K.
Elicitation of the brain microsomal ($Mg^{2+} + Ca^{2+}$)-activated ATPase by digitonin treatment (159) 206
Nakamura, K. and Tamaoki, T.
Reversible dissociation of Escherichia coli ribosomes by hydrogen peroxide (161) 368
Nakamura, K., see Tamaoki, T. (157) 655
Nakamura, M., see Arakawa, K. (168) 106
Nakamura, W. and Hosoda, S.
The absence of glucose in Ehrlich ascites tumor cells and fluid (158) 212
Nakano, H., Sato, H. and Tamaoki, B.
Incorporation of molecular oxygen into testosterone acetate directly derived from progesterone by Cladosporium resinae (164) 585
Nakano, H., Takemoto, C., Sato, H. and Tomaoki, B.-I.
Location of hydroxy groups introduced to steroid molecules by adrenal and testicular enzymes. I (152) 186
Nakano, H., see Takemoto, C. (152) 749
Nakano, M., Tarutani, O. and Danowski, T. S.
Molecular weight of mammalian L-amino-acid oxidase from rat kidney (168) 156
Nakano, M., Ushijima, Y., Saga, M., Tsutsumi, Y. and Asami, H.
Aliphatic L-α-hydroxyacid oxidase from rat livers: Purification and properties (167) 9
Nakano, Y., Fujioka, M. and Wada, H.
Studies on serine hydroxymethylase isoenzymes from rat liver (159) 19
Nakao, K., see Ono, T. (161) 361
Nakao, M., see Mizuno, N. (168) 311
Nakao, T., see Mizuno, N. (168) 311
Nakao, Y., Lee, S. Y., Halvorson, H. O. and Bock, R. M.
The nucleases of yeast. I. Properties and variability of ribonucleases (151) 114
Nakao, Y., see Lee, S. Y. (151) 126
Nakashima, S., see Tsukada, K. (165) 218
Nakatani, T., Araki, Y. and Ito, E.
Preparation and characterization of uridinediphosphate-N-acetylmuramyl-L-alanyl-D-glutamyl-meso-2,6-diaminopimelic acid (156) 210
Nakaya, K., Takenaka, O., Horinishi, H. and Shibata, K.
Reactions of glyoxal with nucleic acids, nucleotides and their component bases (161) 23
Naora, H. and Kodaira, K.
Non-competitive binding of rapidly labeled nuclear RNA by ribosomes (161) 276
Naora, H., see Tsuzuki, J. (169) 550
Narahara, H. T., see Wohltmann, H. J. (150) 500
Narayan, K. A., see Kruski, A. W. (168) 570
Nason, A., see Oliveira, M. M. (150) 319
Nedergaard, S., see Turbeck, B. O. (163) 354
Negishi, T., see Fujino, Y. (152) 428
Negrotti, T., and Wilkie, D.
Induction of respiratory deficiency by repression of the respiratory system in a mutant of Saccharomyces cerevisiae (153) 341
Nelson, T. E., Kolb, E. and Larner, J.
Reinvestigation of the pH optimum in terms of the action and properties of rabbit muscle amylo-1,6-glucosidase-oligo-1,4→1,4-transferase (167) 212
Nemchin, R. G., see Cavalieri, L. F. (166) 722
Nervi, A. M., Brenner, R. R. and Peluffo, R. O.
Effect of arachidonic acid on the microsomal desaturation of linoleic into γ-linolenic acid and their simultaneous incorporation into the phospholipids (152) 539
Nes, W. R., see Raab, K. H. (152) 742
Nestel, P. J., see Austin, W. (164) 59
Nester, E. W., see McCarthy, C. (166) 249
Neufang, B., see Witt, I. (170) 216
Neuhaus, O. W., see Chandler, A. M. (166) 186
Neuhaus, O. W., see Liu, A. Y. (166) 195
Neukom, H., see Painter, T. J. (158) 363
Neuzil, E., see Labadie, M. (165) 525
Nevalainen, T., see Bernstein, R. S. (159) 367
Neville, Jr., D. M.
Isolation of an organ-specific protein antigen from cell-surface membrane of rat liver (154) 540
Neville, E. and Holdsworth, E. S.
Phosphorus metabolism during transport of calcium (163) 362
Newsholme, E. A. and Taylor, K.
A new principle for the assay of metabolites involving the combined effects of isotope dilution and enzymatic catalysis (158) 11
Newton, J. W.
Linkages in the walls of Rhodospirillum rubrum and its bacilliform mutants (165) 534
Neyfakh, A. A., see Kafiani, C. A. (169) 274
Ng, G. W. and Gregory, K. F.
Antibody to lactate dehydrogenase. III. Uptake, accumulation and specific intracellular action in malignant cells (170) 45
Ng, K. and Bassham, J. A.
The quantum requirement of photosynthesis in Chlorella (162) 254
Nichol, A. W., Hendry, I., Morell, D. B. and Clezy, P. S.
Mechanism of formation of sulphhaemo-

globin (156) 97
Nichol, A. W., Lemberg, R. and Harrap, B. S.
The structure of the long alkyl side chain of haem a (158) 165
Nichol, A. W. and Morell, D. B.
The formation of alkylthiohaemoglobins and the structure of their haematin groups (158) 226
Nicholas, D. J. D., see Nagai, Y. (153) 766
Nicholas, D. J. D., see Radcliffe, B. C. (153) 545
Nicholls, P. and Kimelberg, H. K.
Cytochromes a and a_3: Catalytic activity and spectral shifts in situ and in solution (162) 11
Nicholls, P., see Malviya, A. N. (153) 920
Nichols, A. V., Coggiola, E. L., Jensen, L. C. and Yokoyama, E. H.
Physical-chemical changes in serum lipoproteins during incubation of human serum (168) 87
Nichols, Jr., G., see Dos Reis, L. (150) 311
Nichols, J. L. and Lane, B. G.
Characterization of N^4, $O^{2'}$-dimethylcytidine, a rare nucleoside constituent of Escherichia coli 16-S RNA (166) 605
Nicolette, J. A., LeMahieu, M. A. and Mueller, G. C.
A role of estrogens in the regulation of RNA polymerase in surviving rat uteri (166) 403
Nicolskaja, T. I., see Vornovitskaja, G. I. (166) 596
Nielsen, G., see Müller, G. (165) 544
Nieuwenhuizen, W., see De Haas, G. H. (159) 103
Nieuwenhuizen, W., see De Haas, G. H. (159) 118
Niewiarowski, S., see Lukasiewicz, H. (159) 503
Nigam, S. N., see Sasaoka, K. (156) 128
Nigon, V., see Portier, C. (169) 540
Nihei, T. and Kay, C. M.
Isolation and properties of an enzymatically active fragment from papain-digested myosin (180) 46
Niinikoski, J., see Lampiaho, K. (160) 77
Nijhuis, H. H., see Thomas, J. B. (153) 868
Nijs, P.
On the nature of electron and energy transport in mitochondria. II. Multiple activation of mitochondrial respiration (153) 70
Nikkari, T. and Haahti, E.
Isolation and analysis of two types of diester waxes from the skin surface lipids of the rat (164) 294
Nikkilä, E. A. and Pykälistö, O.
Induction of adipose tissue lipoprotein lipase by nicotinic acid (152) 421
Nikolskaya, I. I., Tkatcheva, Z. G., Vanyushin, B. F. and Tikchonenko, T. I.
On the presence of minor bases in DNA of phages DD7 and S_d and their hosts (155) 626
Nilsson, Å.
Intestinal absorption of lecithin and lysolecithin by lymph fistula rats (152) 379
Nilsson, Å.
Metabolism of sphingomyelin in the intestinal tract of the rat (164) 575
Nimni, M., see Deshmukh, K. (154) 258
Nishikawa, K., see Horio, T. (153) 913
Nishimura, M.
Energy- and electron-transfer systems in algal photosynthesis. II. Oxidation-reduction reactions (153) 838
Nishimura, S., see Ikehara, M. (155) 82
Nishimura, S., see Ishikura, H. (155) 72
Nishimura, S., see Seno, T. (157) 97
Nishimura, S., see Seno, T. (169) 80
Nishimura, T., Shimizu, B. and Iwai, I.
Optical rotatory dispersion of the anomeric nucleosides and nucleotides (157) 221
Nishizuka, Y., see Deguchi, T. (158) 382
Nisselbaum, J. S., see Song, C. S. (150) 300
Nitta, K., see Mizuno, S. (157) 322
Nobel, P. S.
Chloroplast shrinkage and increased photophosphorylation in vitro upon illuminating intact plants of Pisum sativum (153) 170
Nohara, H., Takahashi, T. and Ogata, K.
Enzymatic acetylation of histones and some chemical characteristics of their acetyl groups (154) 529
Noll, C., see Kornfeld, R. (170) 77
Nonomura, Y., see Drabikowski, W. (160) 129
Nordin, J. H., see Salo, W. L. (151) 484
Nordin, J. H., see Tung, K. K. (158) 154
Nordlie, R. C., Gilsdorf, J. R., Horne, R. N. and Paur, R. J.
Liver microsomal inorganic pyrophosphate-glucose phosphotransferase: Alterations in activity-pH profiles by cortisone in vivo (158) 157
Nordwig, A. and Dehm, P.
Breakdown of protein: Cleavage of peptides of the X-Pro-Y type by kidney peptidases (160) 293
Nordwig, A. and Pfab, F. K.
Independence of collagen hydroxylation on the conformational state of the precursor substrate (154) 603
Norgaard, M. J. and Montgomery, M. W.
Some esterases of the pea (Pisum sativum L.)(151) 587
Norgaard, M. J., see Montgomery, M. W. (167) 567
Norman, J. R., see Spitzer, H. L. (152) 552
Normand, A., see Berlinguet, L. (161) 509
North, W. G., Hawker, R. W. and Zerner, B.
Isolation of a new oxytocic substance from ox hypothalamus (160) 286
Norton, J. W., Erdmann, V. A. and Herbst, E. J.
Polyamine-inorganic cation interaction with ribosomes of Escherichia coli (155) 293
Norton, J. W., see Erdmann, V. A. (157) 43
Nose, K. and Arima, K.
Studies on bacterial urate: oxygen oxidoreductase. II. Observations concerning the properties and components of the active site (151) 63
Nose, K., see Arima, K. (151) 54
Nosoh, Y., see Hibino, Y. (168) 472
Nosoh, Y., see Mukasa, H. (168) 132
Nosoh, Y., see Mukasa, H. (168) 483
Notton, B. M., see Getz, G. S. (152) 325
Novelli, G. D., see Shungart, L. (157) 83
Novelli, G. D., see Williams, G. R. (155) 183
Nozu, K., see Yamada, Y. (169) 67
Nüesch, J., see Wehrli, W. (157) 215
Nyström, E., see Ellingboe, J. (152) 803

O

Obinata, M. and Mizuno, D.
Intracellular localization of deoxyribonucleases in Escherichia coli (155) 98
O'Brien, P. J. and Muellenberg, C. G.
Incorporation of D-[^{14}C]galactose and N-[^{3}H]acetylneuraminic acid into glycoprotein by particles from bovine retina (158) 189
O'Brien, P. J. and Muellenberg, C. G.
Properties of glycosyl transfer enzymes of bovine retina (167) 268
O'Brien, T. J., Jarvis, B. C., Cherry, J. H. and Hanson, J. B.
Enhancement by 2,4-dichlorophenoxyacetic acid of chromatin RNA polymerase in soybean hypocotyl tissue (169) 35
Öbrink, B., see Wasteson, A. (170) 201
Ochi, Y. and De Groot, L. J.
Stimulation of RNA and phospholipid formation by long acting thyroid stimulator and by thyroid-stimulating hormone (170) 198
Ochoa, S., see Viñuela, E. (155) 558
Öckerman, P. A.
Identity of β-glucosidase, β-xylosidase and one of the β-galactosidase activities in human liver when assayed with 4-methylumbelliferyl-β-D-glycosides. Studies in cases of Gaucher's disease (165) 59
Oda, H., see Watari, H. (167) 184
Ogasawara, N., see Yoshino, M. (167) 216
Ogata, K., Ottesen, M. and Svendsen, I.
Preparation of water-insoluble, enzymatically active derivatives of subtilisin type Novo by cross-linking with glutaraldehyde (159) 403
Ogata, K., Tani, Y., Uchida, Y. and Tochikura, T.
Microbial formation of pyridoxine glucoside, a new derivative of vitamin B_6 (165) 578
Ogata, K., see Nohara, H. (154) 529
Ogawa, K., see Aki, K. (159) 276
Ogur, M., see Betterton, H. (170) 459
Ohaniance, L. et Chaix, P.
Recherche du mécanisme de l'effet inhibiteur de Zn^{2+} sur la synthèse, induite par l'oxygène du système respiratoire de la levure (170) 435
Ohgushi, T. and Yamashina, I.
Distribution of a glycopeptide-degrading enzyme in tissues and cells (156) 417
Ohlenroth, J. and Friedmann, H. C.
Formation of vitamin B_{12} 5'-phosphate during bacterial conversion of factor A to vitamin B_{12} (170) 465
Ohly, B., see Seubert, W. (164) 498
Ohta, N., Pardee, A. B., McAuslan, B. R. and Burger, M. M.
Sialic acid contents and controls of normal and malignant cells (158) 98
Oikawa, K., Kay, C. M. and McCubbin, W. D.
The ultraviolet dichroism of muscle proteins (168) 164
Okamoto, T., see Yura, T. (169) 494
Okamura, K., see Yagi, K. (151) 343
Okamura, K., see Yagi, K. (159) 1
Okayama, S., see Horio, T. (153) 913
Okuda, K. and Hoshita, N.
Oxidation of 5β-cholestane-3α,7α,12α-triol by rat liver mitochondria (164) 381
Okuyama, T., see Schmid, K. (154) 565
Olander, B., see Lindstedt, G. (158) 503
Olavarria, J. M., Gödeken, O. G. R., Sandruss, R. and Flawia, M.
Recovery of liver glucogen in fasted rats (165) 185
Old, L. J., see Kim, J. H. (158) 476
Oldroyd, D., see Munday, K. A. (166) 748
O'Leary, M. E., see Smith, K. C. (169) 430
Oleinick, N. L., Wilhelm, J. M. and Corcoran, J. W.
Nonidentity of the site of action or erythromycin A and chloramphenicol on Bacillus subtilis ribosomes (155) 290
Oleinick, N. L., see Wilhelm, J. M. (166) 268
Olenczak, A. P., see Goodman, I. (156) 364
Oliner, L., see Fischer, A. G. (159) 460
Olivecrona, T., see Fex, G. (152) 237
Olivecrona, T., see Fex, G. (164) 424
Oliveira, M. M. and Nason, A.
Vitamin E deficiency and fatty acid turnover in erythrocyte membranes (150) 319
Oliver, R. W. A. and Viswanatha, T.
Reaction of tris(hydroxymethyl)aminomethane with cinnamoyl imidazole and cinnamoyltrypsin (156) 422
Olomucki, A., Pho, D. B., Lebar, R., Delcambe, L. et Thoai, N. V.
Arginine oxygénase décarboxylante. V. Purification et nature flavinique (151) 353
Olson, J. M., see Ghosh, A. K. (162) 135
Olson, J. M., see Ghosh, A. K. (162) 402
Olson, K. C., Deeney, A. O'C. and Beaudreau, G. S.
Inhibition of protein synthesis by an RNA fraction from myeloblastosis virus (161) 532
Olsson, I.
Biosynthesis of glycosaminoglycans (mucopolysaccharides) in leukemic myeloid cells (165) 324
Olsson, I., Gardell, S. and Thunell, S.
Biosynthesis of glycosaminoglycans (mucopolysaccharides) in human leukocytes (165) 309
Omachi, A., see Glader, B. E. (150) 524
Omachi, A., see Glader B. E. (163) 30
O'Malley, B. W., see McGuire, W. L. (157) 187
Ono, H. and Terayama, H.
Amino acid incorporation into proteins in isolated rat liver nuclei (166) 175
Ono, T., Terayama, H., Takaku, F. and Nakao, K.
Inhibitory effects of hydrocortisone upon the phytohemagglutinin-induced RNA synthesis in human lymphocytes (161) 361
Ono, Y., Ito, Y., Maeda, H. and Ishida, N.
Mode of action of neocarzinostatin: Requirement of protein synthesis for neocarzinostatin-mediated DNA degradation in Sarcina lutea (155) 616
Onodera, K., see Himeno, M. (167) 575
Onodera, K., see Hirano, S. (156) 213
Ooi, T., see Gerber, B. R. (154) 162
Oosawa, F., see Kasai, M. (154) 520
Oppenheim, J., Scheinbuks, J., Biava, C. and Marcus, L.
Polyribosomes in Azotobacter vinelandii. I.

Isolation, characterization and distribution of ribosomes, polyribosomes and subunits in logarithmically growing Azotobacter (161) 386
Oram, J. D. and Reiter, B.
Inhibition of bacteria by lactoferrin and other iron-chelating agents (170) 351
Orii, T.
Non-sulfated acid mucopolysaccharide excretion in normal male children and adults (170) 204
Orloff, J., see Ferguson, D. R. (163) 150
Ormerod, M. G., see Lenherr, A. D. (166) 298
Orr, J. C., see Tanaka, K. (152) 638
Osaki, S., see McDermott, J. A. (151) 541
Osanai, M. und Rembold, H.
Entwicklungsabhängige mitochondriale Enzymaktivitäten bei den Kasten der Honigbiene (162) 22
Oshima, M. and Carpenter, M. P.
The lipid composition of the prepubertal and adult rat testis (152) 479
Östner, U. and Hultin, T.
The use of proteolytic enzymes in the study of ribosomal structure (154) 376
Östner, U., see Hultin, T. (160) 229
Otsuka, H. and Együd, L. G.
On the formation of 2-keto-3-deoxy-D-glucose (165) 172
Otsuka, H., see Kawanami, J. (152) 808
Ottensmeyer, F. P., see Weinblum, D. (155) 24
Ottesen, M. and Wallevik, K.
Use of the pH-stat for measuring the denaturation of ovalbumin in acid solutions (160) 262
Ottesen, M., see Ogata, K. (159) 403
Ottesen, M., see Squire, P. G. (154) 226
Oura, H., see Tsukada, K. (165) 218
Overman, A. R., see Miller, R. J. (167) 607
Owens, L. D., Guggenheim, S. and Hilton, J. L.
Rhizobium-synthesized phytotoxin: An inhibitor of β-cystathionase in Salmonella typhimurium (158) 219
Oyashiki, T., see Mohri, T. (150) 537
Ozawa, K., see Honjo, I. (162) 624

P

Pace-Asciak, C. and Wolfe, L.S.
Inhibition of prostaglandin synthesis by oleic, linoleic and linolenic acids (152) 784
Pačes, V., Doskočil, J. and Šorm, F.
Incorporation of 5-azacytidine into nucleic acids of Escherichia coli (161) 352
Padayatty, J. D., Hensley, M. D. and Van Kley, H.
Stabilization of nucleic acids by proteins toward enzymic digestion (161) 51
Padmanaban, G., see Subramanian, K. N. (151) 20
Page, E., see Krames, B. (150) 24
Paik, W. K., Christinzio, M. and Kim, S.
Liver tryptophan pyrrolase activity during thyroxine-induced metamorphosis of Rana catesbeiana (167) 209
Painter, R. B., see Cleaver, J. E. (161) 552
Painter, T. J. and Neukom, H.
The mechanism of oxidative gelation of a glycoprotein from wheat flour: Evidence from a model system based upon caffeic acid (158) 363
Pajetta, P., see Marzotto, A. (154) 450
Pak, C. Y. C. and Skinner, H. C. W.
Ionic interaction with bone mineral. IV. Varying affinity of synthetic calcium phosphates for Ca^{2+} (165) 274
Paladini, A. C., see Dellacha, J. M. (168) 95
Paladini, A. C., see Franze de Fernández, M. T. (154) 223
Palla, J. C., Ben Abdeljlil, A. et Desnuelle, P.
Action de l'insuline sur la biosynthèse de l'amylase et de quelques autres enzymes du pancréas de rat (158) 25
Palmer, J. M., see George, J. M. (170) 213
Paltauf, F., see Spener, F. (152) 368
Pan, M. W., see Riggs, T. R. (150) 92
Pande, S. V. and Mead, J. F.
Distribution of long-chain fatty acid-activating enzymes in rat tissues (152) 636
Paneque, A., Aparicio, P. J., Catalina, L. and Losada, M.
Enzymatic reduction of nitrate with flavin nucleotides reduced by a new chloroplast NADH-specific diaphorase (162) 149
Panet, A., see De Groot, N. (161) 137
Panet, A., see Lapidot, Y. (157) 433
Panikkar, K. R. and Bachhawat, B. K.
Purification and properties of ATP-sulphate adenylyltransferase from liver (151) 725
Panter, R. A., see Harris, R. J. (161) 291
Panyim, S., Jensen, R. H. and Chalkley, R.
Proteolytic contamination of calf thymus nucleohistone and its inhibition (160) 252
Papa, S., Alifano, A., Tager, J. M. and Quagliariello, E.
Stoicheiometry of the energy-linked nicotinamide transhydrogenase reaction on intact rat-liver mitochondria (153) 303
Papa, S., Lofrumento, N. E., Paradies, G. and Quagliariello, E.
The inhibition of succinate oxidation in isolated mitochondria by uncouplers (153) 306
Papahadjopoulos, D.
Surface properties of acidic phospholipids: Interaction of monolayers and hydrated liquid crystals with uni- and bivalent metal ions (163) 240
Papkoff, H., see Gan, J. (170) 189
Paradies, G., see Papa, S. (153) 306
Pardee, A. B., see Ohta, N. (158) 98
Paris, J. E.
An inexpensive, high capacity gradient-forming device for zonal ultracentrifugation (165) 286
Paris, R. et Clément, G.
Biosynthèse de triglycerides à partir de 2-monopalmitine doublement marqué dans la muqueuse intestinale de rat (152) 63
Parish, J. H.
Use of DEAE-cellulose for the chromatography of RNA of high molecular weight (169) 14
Parish, J. H., see Hastings, J. R. B. (155) 603
Parisi, B., see Perani, A. (161) 223
Parisi, E., see Augusti-Tocco, G. (155) 8
Parnaudeau, M. A., see Bourrillon, R. (154) 405
Parra, N., see Rodriguez, P. (151) 694
Parsa, B., see Malviya, A. N. (162) 195
Parson, W. W.
The role of P870 in bacterial photosynthesis (153) 248
Parsons, D. S., see Boyd, C. A. R. (150) 723
Pascaud, A., Auliac, P. et Pascaud, M.
Réseau endoplasmique hépatique et biosynthèse du cholestérol (150) 326
Pascaud, M., see Huet, C. (150) 521
Pascaud, M., see Pascaud, A. (150) 326
Pasquali, P., Landi, L., Caldarera, C. M. and Marchetti, M.
Effects of orotic acid on dihydrofolate dehydrogenase and on tetrahydrofolate-dependent enzymes in the chick liver (158) 482
Pasquali, P., Landi, L. and Marchetti, M.
Interrelationships between folic acid and biotin: Effect of biotin on the biosynthesis of folate coenzymes (165) 561
Pasqualini, J. R., Lowy, J., Wiqvist, N. and Diczfalusy, E.
Biosynthesis of cortisol from $3\beta,17\alpha,21$-trihydroxypregn-5-en-20-one by the intact human foetus at midpregnancy (152) 648
Pastan, I., see Macchia, V. (152) 704
Patel, A. B., see Pennington, S. N. (167) 479
Patton, S., see Walker, N. J. (152) 445
Pau, R. M. and Acheson, R. M.
The identification of 3-hydroxy-4-O-β-D-glucosidobenzyl alcohol in the left colleterial gland of Blaberus discoidalis (158) 206
Paul, B. and Sbarra, A. J.
The role of the phagocyte in host-parasite interactions. XIII. The direct quantitative estimation of H_2O_2 in phagocytes (156) 157
Paur, R. J., see Nordlie, R. C. (158) 157
Pavičeck, Z., see Karpenko, V. (154) 245
Pawar, S. S. and Tidwell, H. C.
In vitro effect of prostaglandin and dietary fats on lipolysis and esterification in rat adipose tissue (164) 167
Payne, R. W., see Cahill, C. L. (154) 40
Payton, B. W. and Loewenstein, W. R.

Stability of electrical coupling in leech giant nerve cells: Divalent cations, propionate ions, tonicity and pH (150) 156
Pearlstein, R. M.
Fluorescence excitation of chlorophyll in green plants by β particles (153) 504
Pearson, A. M., see McClain, P. E. (168) 143
Pease, J., see Holcenberg, J. S. (158) 500
Pecci, J. and Fujimori, E.
Spectral change of phycoerythrin from Hydrocoleum species and its relationship to protein dissociation. Effects of mercurials on single- and double-peaked forms (154) 332
Pejaudier, L., see Steinbuch, M. (154) 228
Peluffo, R. O., see Nervi, A. M. (152) 539
Penders, T. J., De Rooij-Dijk, H. H. and Leijnse, B.
Rapid isolation of ferritin by means of ultracentrifugation (168) 588
Penkett, S. A., see Chapman, D. (163) 255
Penman, S., see Vesco, C. (169) 188
Penniall, R. and Holbrook, J. P.
The non-specific nature of the nucleoside diphosphatase of rat liver microsomes (151) 700
Penniall, R., Holbrook, J. P., Davidian, N. McC. and Elliott, W. B.
Studies of phosphorus metabolism by isolated nuclei. X. Nucleolar nucleoside diphosphatase activity (157) 258
Pennington, S. N., Brown, H. D., Patel, A. B. and Knowles, C. O.
Properties of matrix-supported acetylcholinesterase (167) 479
Pepper, D. S.
The sialic acids of horse serum with special reference to their virus inhibitory properties (156) 317
Pepper, D. S.
The isolation and properties of γ inhibitor: An equine α_2-macroglobulin sub-fraction (156) 327
Peraino, C.
Regulatory effects of glucocorticoids on ornithine aminotransferase and serine dehydratase in rat liver (165) 108
Perani, A., Parisi, B., De Carli, L. and Ciferri, O.
Incorporation of amino acids by a cell-free system prepared from human cells cultured in vitro (161) 223
Pérez, M. R., Hedeskov, C. J. and Esmann, V.
Glycogen biosynthesis in leukocytes of normal and alloxan diabetic rats (156) 414
Perez del Cerro, M., see Abood, L. G. (153) 531
Perkins, D. J., see Marriott, J. (154) 501
Péron, F. G. and Caldwell, B. V.
Further studies on corticosteroidogenesis. V. 11β-Hydroxylation of deoxycorticosterone by mitochondria incubated with malate, supernatant fraction and supernatant fraction plus pyruvate plus CO_2 (164) 396
Perry, J. J.
The role of potassium in the uptake of CO_2 by Micrococcus sodonensis (165) 538
Perry, R. P., see Liau, M. C. (169) 196
Perumal, A. S., Lakshmanan, M. R. and Cama, H. R.
Effect of vitamins A and K on colon lysosomes (170) 399
Peters, W. J. and Warren, R. A. J.
Phenolic acids and iron transport in Bacillus subtilis (165) 225
Petersen, E. E., Kröger, H. and Hagen, U.
The influence of spermidine on the reaction of RNA nucleotidyltransferase (161) 325
Peterson, D. R., see Salo, W. L. (151) 484
Peterson, N. A., see Raghupathy, E. (161) 575
Peterson, N. A., see Shah, S. N. (164) 604
Peterson, R. E., see Cheng, H. F. (168) 161
Petrova, M., see Mesrob, B. (160) 122
Pfab, F. K., see Nordwig, A. (154) 603
Phillips, A. T.
Mechanism of the inactivation of threonine dehydratase during the dehydration of serine (151) 523
Phillips, J. H., see Isaksson, L. A. (155) 63
Phillips, M. C. and Chapman, D.
Monolayer characteristics of saturated 1,2-diacyl phosphatidylcholines (lecithins) and phosphatidylethanolamines at the air-water interface (163) 301
Phillips, R. and George, P.
Metal-ATP binding. I. Thermodynamic data for adenosine-silver binding (162) 73
Pho, D. B., see Olomucki, A. (151) 353
Piantadosi, C., see Snyder, F. (152) 794
Piatigorsky, J.
Ribonuclease and trypsin treatment of ribosomes and polyribosomes from sea-urchin eggs (166) 142
Pierce, J. G., see Rawitch, A. B. (160) 360
Pieterson, W. A., see Van Golde, L. M. G. (152) 84
Pigman, W., see Herp, A. (165) 76
Pikkarainen, J., Hollmén, T., Lampiaho, K., Kari, A. and Kulonen, E.
Characterization of the large fragments from pepsin-digested, denatured collagen (160) 90
Pilkis, S. J. and Hansen, R. J.
Resolution of two high-K_m ATP: D-hexose 6-phosphotransferase bands by starch-gel electrophoresis (159) 189
Pilkis, S. J., Hansen, R. J. and Krahl, M. E.
Apparent molecular weights of some ATP: D-hexose 6-phosphotransferases: Specific effects of Sephadex G-100 (154) 250
Pinkham, C., see Miller, R. J. (167) 607
Pinna, L. A. and Moret, V.
Phosphorylation of structural protein catalyzed by rat liver mitochondria (153) 494
Pinna, L. A., Moret, V. and Siliprandi, N.
Comparative study of mitochondrial and soluble rat liver protein kinase (159) 563
Pitout, M. J. and Potgieter, D. J. J.
The isolation of highly polymerized DNA from maize (161) 188
Plagemann, P. G. W.
Phenethyl alcohol: Reversible inhibition of synthesis of macromolecules and disaggregation of polysomes in rat hepatoma cells (155) 202
Planta, R. J., see Retèl, J. (169) 416
Plapp, R., see Schleifer, K. H. (154) 573
Plesner, P., see Leick, V. (169) 398
Plesner, P., see Leick, V. (169) 409
Pley, C. W., see Van Duin, J. (155) 444
Plumley, H., see Varandani, P. T. (151) 273
Poccia, D. L., see Samis, Jr., H. V. (166) 410
Pochon, F., Leng, M. et Michelson, A. M.
Photochimie des polynucléotides. III. Etude de la luminescence de polynucléotides à température ordinaire (169) 350
Pochon, F., see Leng, M. (169) 338
Podrazký, V.
Heterogeneity of soluble elastin (160) 277
Podsiadly, C. J., see Johnston, C. C. (163) 417

Poduslo, J. F., see Suzuki, K. (152) 576
Poduslo, S. E., see Suzuki, K. (152) 576
Poelman, M. C., see Veldhuisen, G. (161) 94
Poelman, M. C., see Veldhuisen, G. (161) 109
Poelman, M. C., see Veldhuisen, G. (161) 115
Polatnick, J., see Arlinghaus, R. B. (161) 170
Politzer, P.
A charge-transfer interpretation of the interactions of hemoglobin with oxygen and carbon monoxide (153) 799
Polonovski, J., see Infante, R. (164) 436
Polson, A., see Hickson, T. G. L. (165) 43
Porath, J., see Asperg, K. (160) 116
Porath, J., see Kristiansen, T. (158) 351
Porath, J., see Marshall, W. E. (151) 414
Porter, H.
Neonatal hepatic mitochondrocuprein. III. Solubilization of the copper and protein from mitochondria of newborn liver by reduction with mercaptoethanol (154) 236
Portier, C. et Nigon, V.
Propriétés des RNA ribosomiques obtenus à partir d'une forme blanche d'Euglena gracilis (169) 540
Portman, O. W., Soltys, P., Alexander, M. and Behrman, R. E.
Plasma lysolecithinase activity in pregnancy (167) 610
Possanza, G., see Brodie, H. J. (152) 770
Possmayer, F., Balakrishnan, G. and Strickland, K. P.
The incorporation of labelled glycerophosphoric acid into the lipids of rat brain preparations. III. On the biosynthesis of phosphatidyl glycerol (164) 79
Post, R. L., see Bader, H. (150) 41
Postema, N. M., see De Haas, G. H. (159) 103
Postema, N. M., see De Haas, G. H. (159) 118
Postema, N. M., see Lesslauer, W. (150) 306
Potgieter, D. J. J., see Pitout, M. J. (161) 188
Potgieter, D. J. J., see Schabort, J. C. (151) 33
Potgieter, D. J. J., see Schabort, J. C. (151) 47
Potter, V. R., see Blobel, G. (166) 48
Potter, V. R., see Whittle, E. D. (161) 41
Pouchan, M. I., see Rega, A. F. (150) 742
Poulos, A., Hughes, B. P. and Cumings, J. N.
The biosynthesis of choline plasmalogen by ox heart (152) 629
Pousada, M., see Rosenthal, A. F. (164) 226
Powell, G. L. and Beevers, H.
Fluoroacetyl-CoA as a substrate for malate synthase (151) 708
Pradel, L.-A. et Kassab, R.
Site actif des ATP:guanidine phosphotransférases. II. Mise en évidence de résidus histidine essentiels au moyen du pyrocarbonate d'éthyle (167) 317
Pradel, L.-A., Kassab, R., Conlay, C. et Thoai, N. V.
Propiétés et composition en acides aminés de l'ATP: guanidinoacétate phosphotransférase purifée (154) 305
Pradel, L.-A., see Kassab, R. (167) 308
Pradel, L.-A., see Roustan, C. (167) 326
Pradet, A., see Bomsel, J.-L. (162) 230
Pratt, B. C., see Catlin, E. R. (156) 109
Pratt, L. H. and Bishop, N. I.
Chloroplast reactions of photosynthetic mutants of Scenedesmus obliquus (153) 664
Pratt, L. H. and Bishop, N. I.
The 520-nm light-induced absorbance change in photosynthetic mutants of Scenedesmus (162) 369
Pravdina, N. F. and Galegov, G. A.
Increase of uridine kinase activity in Escherichia coli B following T2-phage infection or chloramphenicol treatment (166) 279
Pressey, R.
Inhibition of invertases by pyridoxal and its analogues (159) 414
Pressman, B. C., see Johnson, J. H. (153) 500
Prestayko, A. W. and Busch, H.
Low molecular weight RNA of the chromatin fraction from Novikoff hepatoma and rat liver nuclei (169) 327
Preston, J. M., see Knowles, J. R. (151) 290
Preuss, H. G., see Ciccone, J. R. (163) 108
Previll, J. M., see Kao, K-Y. T. (151) 568
Prevost, C., see Beck, G. (169) 248
Prezbindowski, K. S., see Sun, F. F. (153) 804
Price, C. A., see Knight, G. J. (158) 283
Price, C. C., Gaucher, G. M., Koneru, P., Shibakawa, R., Sowa, J. R. and Yamaguchi, M.
Relative reactivities for monofunctional nitrogen mustard alkylation of nucleic acid components (166) 327
Prichard, R. and Schofield, P.
The metabolism of phosphoenolpyruvate and pyruvate in the adult liver fluke, Fasciola hepatica (170) 63
Prijs, B., see Erlenmeyer, H. (157) 637
Prior, I. A. M., see Hansen, R. P. (152) 642
Pritchard, R. H., see Ahmad, S. I. (161) 581
Pritchard, R. H., see Barth, P. T. (161) 554
Pritchard, R. H., see Beacham, I. R. (166) 589
Prockop, D. J., see Bhatnagar, R. S. (154) 196
Prockop, D. J., see Kivirikko, K. I. (151) 558
Prokopowicz, J.
Purification of plasminogen from human granulocytes using DEAE-Sephadex column chromatography (154) 91
Pronczuk, A. W., Baliga, B. S., Triant, J. W. and Munro, H. N.
Comparison of the effect of amino acid supply on hepatic polysome profiles in vivo and in vitro (157) 204
Prottey, C., Salway, J. G. and Hawthorne, J. N.
The structures of enzymically produced diphosphoinositide and triphosphoinositide (164) 238
Proudlock, J. W., Wheeldon, L. W., Jollow, D. J. and Linnane, A. W.
Role of sterols in Saccharomyces cerevisiae (152) 434
Pudelkewicz, C. and Holman, R. T.
Positional distribution of fatty acids in liver lecithin of rats as a function of dietary linoleate or linolenate (152) 340
Pudles, J., see Cantau, B. (167) 511
Pulkrábek, P., Raška, Jr., K. and Rychlík, I.
Inhibition of acceptor activity of tRNA by specific antibodies against tRNA (157) 652
Pulkrábek, P. and Rychlík, I.
Effect of univalent cations and the role of GTP and supernatant factors during biosynthesis of polylysine chain (155) 219
Puutula, L., see Gräsbeck, R. (158) 292
Pykälistö, O., see Nikkilä, E. A. (152) 421

Q

Quagliariello, E., Landriscina, C. and Coratelli, P.
Fatty acid synthesis by chain elongation in rat liver mitochondria (164) 12
Quagliariello, E., see Papa, S. (153) 303
Quagliariello, E., see Papa, S. (153) 306
Queen, G., see LaBella, F. S. (158) 286
Quentin, M., see Steinbuch, M. (154) 228
Quirin-Stricker, C., Gross, M. et Mandel, P.
Influence d'une carence en protéines sur l'activité des ribonucléases et sur celle de leur inhibiteur dans la foie de rat (159) 75

R

Raab, K. H., De Souza, N. J. and Nes, W. R.
The H-migration in the alkylation of sterols at C-24 (152) 742
Raacke, I.D., see Matsushita, S. (166) 707
Rabinowitch, E., see Govindjee, R. (162) 539
Rabinowitz, M., see Gross, N. (157) 648
Racker, E., see Guillory, R. J. (153) 490
Radcliffe, B. C. and Nicholas, D. J. D.
Some properties of a nitrite reductase from Pseudomonas denitrificans (153) 545
Radin, N. S., see Bowen, D. M. (152) 587
Radin, N. S., see Bowen, D. M. (152) 599
Rádl, J., see Kithier, K. (160) 135
Radola, B. J.
Radiation-induced hybridization of proteins (160) 469
Rafelson, Jr., M. E., see Booyse, F. M. (157) 660
Rafelson, Jr., M.E., see Booyse, F.M. (166) 689
Rafi, A., Weiss, J.J. and Wheeler, C.M.
Effect of γ-radiation on aqueous solutions of deoxyribonucleic acids of different base composition (169) 230
Raggi, A., see Ronca, G. (167) 626
Ragheb, H. S., see Bruce, R. M. (158) 499
Raghupathy, E., Peterson, N. A. and McKean, C. M.
Inhibition of cell-free protein synthesis by homogentisic acid (161) 575
Raina, A., see Jänne, J. (166) 419
Raina, A., see Weller, D. L. (157) 558
Raina, P. N. and Rosen, F.
Induction of glutamine synthetase by cortisol (165) 470
Raison, J.K. and Evans, W.J.
The enthalpy change in the hydrolysis of the phosphate esters of myo-inositol (170) 448
Rajalakshmi, S. and Handschumacher, R. E.
Control of purine biosynthesis de novo by orotic acid in vivo and in vitro (155) 317
Ramakrishnan, C. and Sarathy, K.P.
Stereochemical studies on cyclic peptides. III. Conformational analysis of cyclotetrapeptides (168) 402
Ramaley, R.F., see Sedmak, J. (170) 440
Ramasarma, T., see Aithal, H. N. (162) 66
Ramasarma, T., see Lakshmanan, M.R. (170) 392
Rama Sastry, B. V. and Chiou, C. Y.
Molecular aspects of the interactions of halogeno-acetylcholines with cholinesterase (167) 339
Rama Sastry, B. V. and White, E. C.
Molecular aspects of the interaction of lactocyl- and glyceroylcholines with acetylcholinesterase (151) 597
Ramirez, J. and Smith, L.
Synthesis of ATP in intact cells of Rhodospirillum rubrum and Rhodopseudomonas spheroides on oxygenation or illumination (153) 466
Ramuz, M., see Chambon, P. (157) 504
Ramuz, M., see Chambon, P. (157) 520
Ranney, H. M., Nagel, R. L., Heller, P. and Udem, L.
Oxygen equilibrium of hemoglobin M (Hyde Park) (160) 112
Rao, S. N., Hara, L. and Askari, A.
Alkali cation-activated AMP deaminase of erythrocytes: Some properties of membrane-bound enzyme (151) 651
Rao, S. N., see Askari, A. (151) 198
Rao, S. N., see Wistrand, P. J. (154) 130
Rappoport, S., see Lapidot, Y. (157) 433
Raška, Jr., K., see Pulkrábek, P. (157) 652
Rasmussen, H., see Fang, M. (153) 88
Rasmussen, H., see Goodman, D. B. P. (153) 749
Rathé, J., see Vandermeers, A. (158) 448
Ratledge, C.
Isolation and identification of N-acetylanthranilic acid from quinic acid metabolism by Aerobacter aerogenes (156) 215
Rawitch, A. B., Liao, T.-H. and Pierce, J. G.
The amino acid sequence of a tryptic glycopeptide from human thyroglobulin (160) 360
Rawson, J. R., see Stutz, E. (161) 564
Raynaud, J., see Mazza, G. (167) 89
Raynaud, M., see Mangalo, R. (168) 583
Razafimahaleo, E. et Bourrillon, R.
Etude sur la structure de l'α_2-macroglobuline humaine (α_2M). I. Préparation de l'α_2M humaine (154) 397
Razafimahaleo, E., see Bourrillon, R. (154) 405
Reader, W., see Scanu, A. (160) 32
Reddy, D. V. N.
Studies on intraocular transport of taurine. I. Accumulation in rabbit ciliary body-iris preparation in vitro (158) 246
Reddy, S. R. R. and Campbell, J. W.
A low molecular weight arginase in the earthworm (159) 557
Reddy, W. J., see Goldstein, S. (150) 733
Reddy, W. J., see Robertson, G. L. (164) 126
Redfearn, E. R., see Knowles, C. J. (162) 348
Rees, A. W. and Krueger, R. C.
A new type of deoxyribonucleoprotein isolated from rabbit thymus nuclei (161) 558
Rega, A. F., Garrahan, P. J. and Pouchan, M. I.
Effects of ATP and Na^+ on a K^+-activated phosphatase from red blood cell membranes (150) 742
Regen, D.M. and Terrell, E.B.
Effects of glucagon and fasting on acetate metabolism in perfused rat liver (170) 95
Reggio, R. B., see Skipski, V. P. (152) 10
Reibel, L., see Kruh, J. (161) 215
Reid, B. R., Stellwagen, R. H. and Cole, R. D.
Further studies on the biosynthesis of very lysine-rich histones in isolated nuclei (155) 593
Reid, B. R., see Stellwagen, R. H. (155) 581
Reif-Lehrer, L.
Induction of glutamine synthetase in chick embryo retina: Effects of serum and steroid structure (170) 263
Rein, H., Ristau, O., Hackenberger, F. und Jung, F.
Elektronenspinresonanz-Untersuchungen von Katalasekomplexen (167) 538
Reinecke, C. J., Van Reisen, R., Voorma, H. O. and Bosch, L.
Chain initiation during polypeptide synthesis in a cell-free bacterial system programmed with plant viral messengers. I. Dependence on formylation and ribosomal factors (157) 566

Reiner, E., see Škrinjarić-Špoljar, M. (165) 289
Reinhammer, B., see Malmström, B. G. (156) 67
Reiter, B., see Oram, J.D. (170) 351
Rembold, H., see Osanai, M. (162) 22
Remold, H., Fasold, H. and Staib, F.
  Purification and characterization of a proteolytic enzyme from Candida albicans (167) 399
Renkonen, O.
  Mono- and diethyl phosphatidates from different subtypes of choline and ethanolamine glycerophosphatides (152) 114
Ressler, C., see Sasaoka, K. (156) 128
Retél, J. and Planta, R.J.
  The investigation of the ribosomal RNA sites in yeast DNA by the hybridization technique (169) 416
Rexová, L., see Kaláč, J. (167) 590
Reyes, E., see Bartnicki-Garcia, S. (165) 32
Reyes, E., see Bartnicki-Garcia, S. (170) 54
Reynolds, C. A., see Kleihauer, E. F. (154) 220
Reynolds, J. W., Mancuso, S. and Diczfalusy, E.
  Isolation of 16-oxo-testosterone from human placentas perfused in situ (152) 438
Rhaese, H.-J.
  Chemical analysis of DNA alterations. III. Isolation and characterization of adenine oxidation products obtained from oligo- and monodeoxyadenylic acids treated with hydroxyl radicals (166) 311
Rhaese, H.-J. and Freese, E.
  Chemical analysis of DNA alterations. I. Base liberation and backbone breakage of DNA and oligodeoxyadenylic acid induced by hydrogen peroxide and hydroxylamine (155) 476
Rhaese, H.-J., Freese, E. and Melzer, M. S.
  Chemical analysis of DNA alterations. II. Alteration and liberation of bases of deoxynucleotides and deoxynucleosides induced by hydrogen peroxide and hydroxylamine (155) 491
Ribadeau Dumas, B.
  Simultaneous determination of α_{s1}-, β-, and κ-caseins in whole casein by using carboxypeptidase A (168) 274
Ricard, J., see Mazza, G. (167) 89
Rice, G., see Bannister, T.T. (162) 555
Rich, M. A., see Lin, F. H. (157) 310
Richards, K. C., Ruderman, N. B. and Herrera, M. G.
  Effects of oleate concentration on its metabolism by the perfused rat liver (152) 632
Richardson, S. H.
  An ion translocase system from rabbit intestinal mucosa. Preparation and properties of the (Na^+-K^+)-activated ATPase (150) 572
Richter, G., see Beiderbeck, R. (157) 658
Rickert, W.S. and Viswanatha, T.
  Studies on canavanine and its derivatives (170) 123
Ried, A.
  Interactions between photosynthesis and respiration in Chlorella. I. Types of transients of oxygen exchange after short light exposures (153) 653
Riemersma, J. C.
  Osmium tetroxide fixation of lipids for electron microscopy: A possible reaction mechanism (152) 718
Riemersma, J. C.
  Effects of sodium azide and 2,4-dinitrophenol on phosphorylation reactions and ion fluxes in Saccharomyces cerevisiae (153) 80
Rienits, K. G., see Stewart, B. W. (153) 907
Riera, B., see Emiliani, E. (167) 414
Riggs, T. R., Pan, M. W. and Feng, H. W.
  Transport of amino acids into the estrogen-primed uterus. I. General characteristics of the uptake in vitro (150) 92
Rippon, W. J.
  Extracellular collagenase produced by Streptomyces madurae (159) 147
Ristau, O., see Rein, H. (167) 538
Ristow, H. and Arends, S.
  A system in vitro for the synthesis of RNA and protein by isolated salivary glands and by nuclei from Chironomus larvae (157) 178
Ritter, F., see Schubert, K. (152) 401
Rizzo, A.J. and Webb, T.E.
  Concurrent changes in the concentration of monomeric ribosomes and the rate of ribosome synthesis in rat liver (169) 163
Robbins, K.C., see Groskopf, W.R. (168) 376
Robbins, M., see Strauss, B.S. (161) 68
Roberts, E., see Horiguchi, M. (165) 164
Roberts, J. L., see Vierling, J. (160) 53
Robertson, G. L. and Reddy, W. J.
  An effect of corticotropin on adrenal fatty acid synthesis (164) 126
Robinson, D. and Stirling, J.L.
  Effect of tesosterone on β-glycosidases in rooster comb and wattles (170) 420
Robinson, J., see Trams, E.G. (163) 459
Robinson, J. C., see Goldsmith, L. A. (159) 405
Rocha, V., see Saxton, R. E. (156) 77
Rodén, L., see Cifonelli, J. A. (165) 553
Rodén, L., see Helting, T. (170) 301
Rodionova, N. P., see Tulegenova, L. S. (166) 265
Rodriguez, P., Bass, S. T. and Hansen, R. G.
  A pyrophosphatase from mammalian tissues specific for derivatives of ADP (167) 199
Rodriguez, P., Parra, N., Bello, O. and Gaede, K.
  Studies on the thyroidal UDPG pyrophosphorylase: Partial purification and some of its properties (151) 694
Rodriguez Fernández, C., see Hörmann, H. (168) 157
Roe, B. A., see Stenesh, J. (161) 442
Rogers, A. I. and Bachorik, P. S.
  Chymotrypsin esterase activity in the presence of oleic and taurocholic acid (159) 200
Rogers, D. A., see Catsimpoolas, N. (168) 122
Rogers, K. T.
  Levels of (Na^+ + K^+)-activated and Mg^{2+}-activated ATPase activity in bovine and feline corneal endothelium and epithelium (163) 50
Rogers, Jr., W. E., see Geison, R. L. (165) 448
Roholt, O. A., see Doyle, R. J. (160) 274
Rojas, E. and Hidalgo, C.
  Effect of temperature and metabolic inhibitors on ^{45}Ca outflow from squid giant axons (163) 550
Rolland, M., see Valenta, L. (168) 507
Rollins, M. H., see Futterman, S. (164) 433
Romano, A. H. and Kornberg, H. L.
  Regulation of sugar utilization by Aspergillus nidulans (158) 491
Romeo, D. and De Bernard, B.
  Purification and properties of beef heart β-glucuronidase (159) 194
Ronca, G., Raggi, A. and Ronca-Testoni, S.
  Muscle AMP aminohydrolase. I. Some regulatory properties of rat skeletal mus-

cle enzyme (167) 626

Ronca, G. and Zucchelli, G.
Competitive inhibition of adenosine deaminase by purine and pyrimidine bases (159) 203

Ronca-Testoni, S., see Ronca, G. (167) 626

Roques, M., see Valenta, L. (168) 507

Rose, D. P., Yao, Y.-M. S. and Brown, R. R.
Transport and further metabolism of intermediate compounds of the tryptophan-nicotinic acid ribonucleotide pathway by rat small intestine (163) 93

Rose, H. G.
Studies on the equilibration of radioisotopic cholesterol with human serum lipoprotein cholesterol in vitro (152) 728

Rose, S.M., see Good, W. (163) 483

Rosen, D. and Sutton, A. M.
The effects of a d. c. potential bias on the electrical properties of bimolecular lipid membranes (163) 226

Rosen, F., see Raina, P. N. (165) 470

Rosenberg, H. and La Nauze, J. M.
The isolation of a mutant of Bacillus cereus deficient in phosphate uptake (156) 381

Rosenberg, H., see Allen, A. K. (151) 504

Rosenberg, H., see Allen, A. K. (152) 208

Rosenberg, H., see La Nauze, J. M. (165) 410

Rosenberg, H., see Liang, C. R. (156) 437

Rosenberg, L. E., see Hillman, R. E. (150) 528

Rosenberg, P., see Condrea, E. (150) 271

Rosenberg, S.A. and McIntosh, J.R.
Erythrocyte membranes: Effects of sonication (163) 285

Rosenbloom, A. A. and Elsbach, P.
Lecithin and lysolecithin metabolism by isolated mucosal cells of the toad bladder (164) 72

Rosenbloom, F. M., Henderson, J. F., Kelley, W. N. and Seegmiller, J. E.
Accelerated purine biosynthesis de novo in skin fibroblasts deficient in hypoxanthine-guanine phosphoribosyltransferase activity (166) 258

Rosenbusch, J., see Dos Reis, L. (150) 311

Rosenkranz, H. S., Jacobs, S. J. and Carr, H. S.
Studies with hydroxyurea. VIII. The DNA of hydroxyurea-treated cells (161) 428

Rosensweig, N.S., Stifel, F.B., Herman, R.H. and Zakim, D.
The dietary regulation of the glycolytic enzymes. II. Adaptive changes in human jejunum (170) 228

Rosensweig, N.S., see Stifel, F.B. (170) 221

Rosenthal, A. F. and Ching-Hsien Han, S.
Effects in vitro and in vivo of synthetic phosphatidate phosphatase inhibitors (152) 96

Rosenthal, A.F. and Pousada, M.
Inhibition of phospholipase C by phosphonate analogs of glycerophoshatides (164) 226

Rosenwasser, L. J., see Fishman, M. M. (166) 584

Ross, C.
Influence of cycloheximide (actidione) upon pyrimidine nucleotide metabolism and RNA synthesis in cocklebur leaf discs (166) 40

Ross, J., Kochwa, S. and Wasserman, L. R.
Iron-transferrin complex formation (154) 70

Rosser, R. J., see Saxton, R. E. (156) 77

Rossi, F. and Zatti, M.
Mechanism of the respiratory stimulations in saponine-treated leucocytes. The KCN-insensitive oxidation of NADPH (153) 296

Rossi Fanelli, A., see Brunori, M. (154) 315

Rothblat, G.H., Buchko, M.K. and Kritchevsky, D.
Cholesterol uptake by L5178Y tissue culture cells: Studies with delipidized serum (164) 327

Rothfus, J. A. and Crow, M. J. A.
Aminoethylation and fractionation of glutenin: Evidence of differences from gliadin (160) 404

Rothschild, M.L., Halpern, R.M. and Smith, R.A.
A facile separation of terminal and replicative deoxynucleotidyl transferases of Walker-256 carcinosarcoma (169) 218

Rothstein, A., see Fuhrmann, G.F. (163) 325

Rothstein, A., see Fuhrmann, G.F. (163) 331

Rothwell, P., see Heathcote, J. G. (153) 13

Rous, S., Lüthi, L., Burlet, M. J. et Favarger, P.
Incorporation de divers précurseurs hydrogènes dans les acides gras de la souris vivante (152) 462

Rous, S., Lüthi, L. et Favarger, P.
Incorporation dans les acides gras de glucoses diversement marqués au ^{14}C. Contribution à l'étude de la voie oxydative du glucose (152) 454

Rousseau, G. and Crabbé, J.
Stimulation by aldosterone of a rapidly labelled RNA fraction in toad bladder tissue (157) 25

Roustan, C., Kassab, R., Pradel, L.-A. et Thoai, N. V.
Interaction des ATP:guanidine phosphotransférases avec leurs substrats, etudiée par spectrophotométrie différentielle (167) 326

Roustan, C., see Kassab, R. (167) 308

Rouvière, J., Wyngaarden, J., Cantoni, J., Gros, F. and Kepes, A.
Effect of T_4 infection on messenger RNA synthesis in Escherichia coli (166) 94

Rowe, C. E., see Lunt, G. G. (152) 681

Roy, A.B., see Allen, E. (168) 243

Roy, A. B., see Banerjee, R. K. (151) 573

Roy, A.D., see Goldberg, D.M. (167) 613

Roy, A.K.
Effects of aflatoxin B_1 on polysomal profiles and RNA synthesis in rat liver (169) 206

Roy, K. L. and Söll, D.
Fractionation of Escherichia coli transfer RNA on benzoylated DEAE-cellulose (161) 572

Rozenberg, M. C. and Holmsen, H.
Adenine nucleotide metabolism of blood platelets. II. Uptake of adenosine and inhibition of ADP-induced platelet aggregation (155) 342

Rozenberg, M. C. and Holmsen, H.
Adenine nucleotide metabolism of blood platelets. IV. Platelet aggregation response to exogenous ATP and ADP (157) 280

Rozenberg, M. C., see Holmsen, H. (155) 326

Rozenberg, M. C., see Holmsen, H. (157) 266

Rozengurt, E., see Jiménez de Asúa, L. (170) 254

Rudack, D. and Wallace, R. A.
On the site of phosvitin synthesis in Xenopus laevis (155) 299

Rudel, L. L., see Younathan, E. S. (168) 11

Ruderman, N. B., see Richards, K. C. (152) 632

Rüdiger, H. W., see Blume, K. G. (151) 686

Ruelius, H.W., Kerwin, R.M. and Janssen, F.W.
Carbohydrate oxidase, a novel enzyme

from Polyporus obtusus. I. Isolation and purification (167) 493
Ruelius, H. W., see Janssen, F. W. (151) 330
Ruelius, H.W., see Janssen, F.W. (167) 501
Rumen, N. M., see Maričić, S. (154) 496
Runnegar, M.T.C., Blakeley, R.L., Fernley, R.T., Webb, E.C. and Zerner, B.
The system: Hydroxylamine-oxygen-cupric ion. A model hydroxylase in the inactivation of ox and pig liver carboxylesterases (167) 632
Runner, C. M., see Van Bruggen, E. F. J. (161) 402
Russel, D.W., Conn, E.E., Sutter, A. and Grisebach, H.
Hydroxylation-induced migration and retention of tritium on conversion of [4-^{3}H]cinnamic acid to 4-hydroxycinnamic acid by an enzyme from pea seedlings (170) 210
Russell, E. C. and Cowgill, R. W.
Fluorescence and protein structure. XIII. Further effects of side-chain groups (154) 231
Ruttenberg, G. J. C. M., Smit, E. M., Borst, P. and Van Bruggen, E. F. J.
The number of superhelical turns in mitochondrial DNA (157) 429
Ruttenberg, G. J. C. M., see Van Bruggen, E. F. J. (161) 402
Ryan, J. W., see Johnson, D. C. (160) 196
Ryan, K. J., see Meigs, R. A. (165) 476
Rychlik, I., see Černá, J. (157) 436
Rychlik, I., see Dousá, T. (158) 484
Rychlik, I., see Pulkrábek, P. (155) 219
Rychlik, I., see Pulkrábek, P. (157) 652
Rytter, D., Miller, J. E. and Cornatzer, W. E.
Specificity for incorporation of choline and ethanolamine into rat liver microsomal lecithins (152) 418
Rýznar, L., see Drášil, V. (166) 600

S

Sachar, R. C.
Biosynthesis of ribonucleic and polyadenylic acid in tobacco leaf homogenates (169) 58

Sachs, G., Collier, R. H., Shoemaker, R. L. and Hirschowitz, B. I.
The energy source for gastric H^+ secretion (162) 210

Saga, M., see Nakano, M. (167) 9

Saint-Blancard, J., see Jollès, P. (151) 532

Saint-Blancard, J., see Locquet, J.-P. (167) 150

Saito, K. and Mukoyama, K.
Enzymatic hydrolysis of phosphosphingolipids by Clostridium perfringens phospholipase C (164) 596

Saito, K. and Sato, K.
Studies on the lecithinase from Penicillium notatum (151) 706

Sajdel, E. M., see Jacob, S. T., (157) 421

Sakaguchi, G., see Kitamura, M. (168) 207

Sakaguchi, S., see Kitamura, M. (168) 207

Sakai, F., see Himeno, M. (167) 575

Sakai, H. and Kihara, H. K.
Incorporation of labeled uridine into mouse liver protein (157) 630

Sakai, S. and Yamanaka, K.
Crystalline D-mannitol: NAD^+ oxidoreductase from Leuconostoc mesenteroides (151) 684

Sakakibara, Y., see Tanooka, H. (155) 130

Sakamoto, Y., see Fujikawa, K. (169) 520

Sakamoto, Y., see Higashi, K. (166) 388

Sakamoto, Y., see Wada, F. (162) 518

Salák, J., see Čejka, J. (154) 589

Sale, A. J. H. and Hamilton, W. A.
Effects of high electric fields on micro-organisms. III. Lysis of erythrocytes and protoplasts (163) 37

Salisbury, C. M., see Bannister, W. H. (168) 392

Sallach, H. J., see Cheung, G. P. (170) 334

Salo, W. L., Nordin, J. H., Peterson, D. R., Bevill, R. D. and Kirkwood, S.
The specificity of UDP-glucose 4-epimerase from the yeast Saccharomyces fragilis (151) 484

Salsbury, N. J. and Chapman, D.
Physical studies of phospholipids. VIII. Nuclear magnetic resonance studies of diacyl-L-phosphatidyicholines (lecithins) (163) 314

Salton, M. R. J., see Munoz, E. (150) 531

Salvatore, F., Zappia, V. and Shapiro, S. K.
Quantitative analysis of S-adenosylhomocysteine in liver (158) 461

Salvenmoster, F., see Kramar, R. (162) 289

Salway, J. G., see Prottey, C. (164) 238

Samachson, J. and Schmitz, A.
The reactions of H^+ and Zn^{2+} with the surfaces of bone and bone mineral (170) 409

Samec, J., Jacob, M. and Mandel, P.
Occurrence of light particles carrying DNA-like RNA in the microsomal fraction of adult rat brain (161) 377

Samejima, T., see Hibino, Y. (168) 472

Saminski, E., see Bresler, S. (155) 465

Samis, Jr., H. V., Poccia, D. L. and Wulff, V. J.
The effect of salt extraction and heat denaturation on the behavior of rat liver chromatin (166) 410

Samuelsson, B. and Samuelsson, K.
Gas-liquid chromatographic separation of ceramides as di-O-trimethylsilyl ether derivatives (164) 421

Samuelsson, B., see Lands, W. E. M. (164) 426

Samuelsson, K., see Samuelsson, B. (164) 421

Sand, D. M. and Schlenk, H.
The distribution of odd-numbered essential and other polyenoic fatty acids in rat liver lipids (164) 598

Sand, D. M., see Mangold, H. K. (164) 124

Sandberg, L. B. and Cleary, E. G.
Pattern of lysine incorporation into elastin of growing chick aorta (154) 411

Sandermann, Jr., H. and Grisebach, H.
Occurrence of UDP-apiose in parsley (Apium petroselium L.) (156) 435

Sandermann, Jr., H., Tisue, G. T. and Grisebach, H.
Biosynthesis of D-apiose. IV. Formation of UDP-apiose from UDP-D-glucuronic acid in cell-free extracts of parsley (Apium petroselium L.) and Lemna minor (165) 550

Sandler, R. and Hall, P. F.
The influence of age upon the response of rat testis to interstitial cell-stimulating hormone in vitro (164) 445

Sandoval, A., see Hanna, M. W. (155) 433

Sandru, D., see Comorosan, S. (166) 394

Sandruss, R., see Olavarria, J. M. (165) 185

Sanejouand, J., see Huc, A. (154) 408

San Martin de Viale, L. C. and Grinstein, M.
Porphyrin biosynthesis. IV. 5- and 6-COOH porphyrinogens (type III) as normal intermediates in haem biosynthesis (158) 79

Sano, I., see Kakimoto, Y. (156) 374

Santilli, V., Škoda, J., Gut, J. and Šorm, F.
Dihydro-5-azaorotic acid, the first specific inhibitor of dihydro-orotate dehydrogenase (155) 623

Santos, I., see De la Morena, E. (151) 526

Sarathy, K. P., see Ramakrishnan, C. (168) 402

Sargent, A. A., see Simkin, J. L. (170) 422

Sarkar, S. and Jockusch, H.
Wild-type and defective coat proteins of tobacco mosaic virus: Electrophoretic analysis of plant extracts in polyacrylamide gels (160) 259

Sarma, P. A., see Subramanian, K. N. (156) 199

Sarma, P. S., see Subramanian, K. N. (151) 20

Sartorelli, A. C., see Tyrsted, G. (155) 619

Sasaki, T., see Ishihara, H. (166) 496

Sasaoka, K., Lauinger, C., Nigam, S. N. and Ressler, C.
γ-Glutamyl-cyanoalanylglycine, a metabolite of β-cyanoalanine in the rat and chick (156) 128

Sato, E., see Seraydarian, M. W. (162) 414

Sato, H., see Nakano, H. (152) 186

Sato, H., see Nakano, H. (164) 585

Sato, H., see Takemoto, C. (152) 749

Sato, K., Suzuki, R. and Tsuiki, S.
Oxidation of [6-^{14}C] glucose to $^{14}CO_2$ by the pentose cycle in Ehrlich ascites tumor cells (165) 189

Sato, K. and Tsuiki, S.
Fructose 1,6-diphosphatase of mouse Ehrlich ascites tumor and its comparison with

the enzymes of liver and skeletal muscle of the mouse (159) 130

Sato, K., see Saito, K. (151) 706

Sato, R., see Yoshimoto, A. (153) 555

Sato, R., see Yoshimoto, A. (153) 576

Sato, T., see Mukasa, H. (168) 132

Sato, T., see Mukasa, H. (168) 483

Sauer, K., see Trosper, T. (162) 97

Sauermann, G.
On the reversibility of the first segment of glycolysis in ascites tumor cells (158) 1

Sauermann, G.
The inhibition of palmitate oxidation by 2-deoxy-D-glucose in ascites tumor cells (170) 88

Saunders, S. J., see Hickman, R. (161) 197

Savage, N. and Weight, M. J.
The stereochemistry of hydrogen transfer catalysed by D(−)-3-hydroxybutyrate dehydrogenase (159) 401

Saxton, R. E., Rocha, V., Rosser, R. J., Andreoli, A. J., Shimoyama, M., Kosaka, A., Chandler, J. L. R. and Gholson, R. K.
A comparative study of the regulation of nicotinamide-adenine dinucleotide biosynthesis (156) 77

Sayre, F. W., Fishler, M. C., Humphreys, G. K. and Jayko, M. E.
Growth factor studies: Changes in reactivity of sulfhydryl groups with activation (160) 63

Sayre, F. W., Fishler, M. C. and Jayko, M. E.
Activation of a growth factor by non-physiological means (160) 204

Sbarra, A. J., see Paul, B. (156) 168

Scanu, A., Reader, W. and Edelstein, C.
Molecular weight and subunit structure of human serum high density lipoprotein after chemical modification by succinic anhydride (160) 32

Scarano, E., see Augusti-Tocco, G. (155) 8

Scarpa, A. and Azzi, A.
Cation binding to submitochondrial particles (150) 473

Scatturin, A., see Tamburro, A. M. (154) 583

Scazzocchio, C. and Darlington, A. J.
The induction and repression of the enzymes of purine breakdown in Aspergillus nidulans (166) 557

Scazzocchio, C., see Darlington, A. J. (166) 569

Schabort, J. C. and Potgieter, D. J. J.
Cucurbitacin B Δ^{23}-reductase from Cucurbita maxima. II. Cofactor requirements, enzyme kinetics, substrate specificity and other characteristics (151) 47

Schabort, J. C., Potgieter, D. J. J. and De Villiers, V.
Cucurbitacin B Δ^{23}-reductase from Cucurbita maxima. I. Assay methods, isolation and purification (151) 33

Schaeffer, L. D., see Dunn, A. (165) 170

Schäfer, G. and Nägel, L.
Action of insulin and triiodothyronine on energy-controlled pathways of hydrogen (162) 617

Schally, A. V. and Barrett, J. F.
Isolation and structure of a hexapeptide from pig neurohypophysis (154) 595

Schauer, H. and Gottschalk, A.
Studies on glycoproteins. XVII. Purification of O-seryl-N-acetylgalactosaminide glycohydrolase. Its complete separation from N-acetyl-β-D-hexosaminidase and proteases (156) 304

Schaumburg, B. P. and Bojesen, E.
Specificity and thermodynamic properties of the corticosteroid binding to a receptor of rat thymocytes in vitro (170) 172

Scheinbuks, J., see Oppenheim, J. (161) 386

Scheit, K.-H.
Die Synthese von Desoxy-4-thiothymidin-3',5'-diphosphat (157) 632

Scheit, K.-H.
Über die Synthese und Eigenschaften von 4-Thiouridylyl-(3'-5')-4-thiouridin, 4-Thiouridylyl-(3'-5')-uridin und Uridylyl-(3'-5')-4-thiouridin (166) 285

Schejter, A. and Berke, G.
The reactions of cytochrome c_1 with ligands (162) 459

Schejter, A., see Gutman, M. (162) 506

Schell, P. L.
Uptake of polynucleotides by mouse ascites tumor cells. V. Uptake of DNA (166) 156

Scherrer, J. W., see Goodman, I. (156) 364

Schiff, H. F., see Fishman, M. M. (157) 419

Schildkraut, C. L. and Maio, J. J.
Studies on the intranuclear distribution and properties of mouse satellite DNA (161) 76

Schimpfessel, L.
Présence et régulation de la synthèse de deux alcool déshydrogénases chez la levure Saccharomyces cerevisiae (151) 317

Schleifer, K. H., Plapp, R. und Kandler, O.
Die Aminosäuresequenz des Mureins von Microbacterium lacticum (154) 573

Schlenk, H., see Sand, D. M. (164) 598

Schleyer, H.
Electron paramagnetic resonance studies on photosynthetic bacteria. I. Properties of photoinduced EPR-signals of Chromatium D (153) 427

Schlunk, F. F., Longnecker, D. S. and Lombardi, B.
On the ethionine-induced inhibition of protein synthesis in male and female rats. Lack of effect on intestinal mucosa (158) 425

Schmid, H. H. O. and Takahashi, T.
The alk-1-enyl ether and alkyl ether lipids of bovine heart muscle (164) 141

Schmid, K., Okuyama, T. and Kaufmann, H.
Isolation and chemical composition of the human plasma α_1-acid glycoprotein variants (154) 565

Schmidt, D. G. and Van Markwijk, B. W.
Further studies on the associating subunit of α_{S1}-casein (154) 613

Schmitz, A., see Samachson, J. (170) 409

Schnatz, J. D. and Cortner, J. A.
Genetic variation of alkaline lipolytic activity in rabbits (167) 367

Schneider, C. H. and De Weck, A. L.
Studies on the direct neutral penicilloylation of functional groups occurring on proteins (168) 27

Schneider, H.
The intramembrane location of alcohol anesthetics (163) 451

Schneir, M. and Moldave, K.
The isolation and biological activity of multiple forms of aminoacyl transferase I of rat liver (166) 58

Schofield, P. and Zamecnik, P. C.
Cupric ion catalysis in hydrolysis of aminoacyl-tRNA (155) 410

Schofield, P., see Prichard, R. (170) 63

Scholes, G. and Simic, M.
Radiolysis of aqueous solutions of DNA

and related substances; reaction of hydrogen atoms(166) 255

Scholes, P. B. and Smith, L.
The isolation and properties of the cytoplasmic membrane Micrococcus denitrificans(153) 350

Scholes, P. B. and Smith, L.
Composition and properties of the membrane-bound respiratory chain system of Micrococcus denitrificans(153) 363

Scholtissek, Chr.
Nucleotide metabolism in tissue culture cells at low temperatures. III. Studies in vitro(155) 14

Scholtissek, Chr.
Studies on the uptake of nucleic acid precursors into cells in tissue culture(158) 435

Schousboe, A., see Kristensen, P.(153) 132
Schraer, H., see Bernstein, R. S.(159) 367
Schraer, R., see Bernstein, R. S.(159) 367
Schramm, G., see Beyersmann, D.(159) 64
Schramm, G., see Lünzmann, G.(169) 263

Schramm, M.
Amylase secretion in rat parotid slices by apparent activation of endogenous catecholamine(165) 546

Schubert, K., Böhme, K.-H., Ritter, F. und Hörhold, C.
Mikrobieller Abbau von Progesteron zu α-Ketoglutarsäure und Bernsteinsäure (152) 401

Schuit, K. E. and Buetow, D. E.
Sucrose density-gradient analysis of Euglena gracilis RNA isolated with Macaloid (166) 702

Schulman, H. M.
Hemoglobin synthesis during rabbit reticulocyte maturation in vitro(155) 253

Schulman, H. M. and Jobe, A.
The inhibition of heme and globin synthesis by cobalt in rabbit reticulocytes and bone marrow(169) 241

Schultz, I., see Bielka, H.(157) 209
Schulz, A. R., see Fischer, A. G.(159) 460

Schüssler, H.
Über die chromatographische Auftrennung sowie Aktivierung und Inaktivierung der alkalischen Phosphatase aus Hühnerdarm(151) 383

Schuurmans Stekhoven, F. M. A. H., see Van Bruggen, E. F. J.(161) 402
Schwartz, A., see Matsui, H.(151) 655
Schweiger, H. G., see Dillard, W. L.(169) 561

Schweitz, H.
Action de l'eau oxygénée sur le DNA en présence d'ions ferreux et de lumière (166) 720

Schwendimann, M., see Lado, P.(157) 140

Schwimmer, S.
Differential effects of putrescine, cadaverine and glyoxal-bis(guanylhydrazone) on DNA- and nucleohistone-supported DNA synthesis(166) 251

Scoffone, E., see Jori, G.(154) 1
Scoffone, E., see Marzotto, A.(154) 450

Scott, J. E.
Periodate oxidation, pK_a and conformation of hexuronic acids in polyuronides and mucopolysaccharides(170) 471

Scouten, W., see Cohn, M. L.(159) 182
Scrimger, J. W., see Tamaoki, T.(157) 655
Scutt, P. B., see Moss, D. W.(154) 609

Searcy, D. G.
Techniques for DNA hybridization in vitro using non-radioactive DNA and DNA made radioactive by neutron activation, alkylation with radioactive alkylating agents, and by exchange with ^3H_2O(166) 360

Šebesta, K. and Horská, K.
Inhibition of DNA-dependent RNA polymerase by the exotoxin of Bacillus thuringiensis var. gelechiae(169) 281

Sedmak, J. and Ramaley, R. F.
Identification of succinyl-CoA synthetase as the major phosphorylated protein formed from ATP in Escherichia coli extracts (170) 440

Seegmiller, J. E., see Rosenbloom, F. M.(166) 258
Seely, G. R., see Diehn, B.(153) 862
Segal, S., see Crawhall, J. C.(163) 163
Segal, S., see Lowenstein, L. M.(150) 73
Segal, S., see Lowenstein, L. M.(150) 416
Segal, S., see Smith, I.(163) 281
Segal, S., see States, B.(163) 154
Segal, S., see Weinstein, A. N.(156) 9
Segel, I. H., see Woodin, T. S.(167) 64
Segel, I. H., see Woodin, T. S.(167) 78
Segel, W., see Hsiao, T. C.(157) 640

Seliskar, C. J. and Ke, B.
Protochlorophyllide aggregation in solution and associated spectral changes (153) 685

Sells, B. H., see Ennis, H. L.(161) 503
Sells, B. H., see Groves, W. E.(168) 113
Sells, B. H., see Jackson, C. D.(155) 417
Semenza, G., see Cummins, D. L.(160) 396

Senger, H. and Bishop, N. I.
An action spectrum from nucleic acid formation in an achlorophyllous mutant of Chlorella pyrenoidosa(157) 417

Seno, T., Kobayashi, M. and Nishimura, S.
Purification of Escherichia coli methionine $\mathrm{tRNA_F}$ and methionine $\mathrm{tRNA_M}$ and studies on their biophysical and biochemical properties(169) 80

Seno, T. and Nishimura, S.
Specific hybridization of amino acid-specific transfer RNA to DNA in Escherichia coli(157) 97

Sentenac, A., Simon, E. J. and Fromageot, P.
Initiation of chains by RNA polymerase and the effects of inhibitors studied by a direct filtration technique(161) 299

Sentenac, A., see Darlix, J.-L.(166) 438

Serafini-Fracassini, A.
The protein-polysaccharide complex of bovine nasal cartilage. Studies on the molecular organisation(170) 289

Seraydarian, K., Briskey, E. and Mommaerts, W. F. H. M.
The modification of actomyosin by α-actinin. IV. The role of sulfhydryl groups (162) 424

Seraydarian, M. W., Harary, I. and Sato, E.
In vitro studies of beating-heart cells in culture. XI. The ATP level and contractions of the heart cells(162) 414

Serif, G. S., see Butcher, F. R.(156) 59
Serif, G. S., see Lee, C.(165) 569

Sessa, G. and Weissmann, G.
Differential effects of etiocholanolone on phospholipid-cholesterol structures containing either testosterone or estradiol (150) 173

Setlow, J. K. and Bollum, F. J.
The minimum size of the substrate for yeast photoreactivating enzyme(157) 233

Settlemire, C. T., Hunter, G. R. and Brierley, G. P.
Ion transport in heart mitochondria. XIII. The effect of ethylenediaminetetraacetate

on monovalent ion uptake (162) 487
Seubert, W., Lamberts, I., Kramer, R. and Ohly, B.
On the mechanism of malonyl-CoA-independent fatty acid synthesis. I. The mechanism of elongation of long-chain fatty acids by acetyl-CoA (164) 498
Sgoutas, D.S.
Hydrolysis of synthetic cholesterol esters containing trans fatty acids (164) 317
Shafai, T. and Lewin, L.M.
Effects of myo-inositol deficiency upon the lipid composition of the yeast, Saccharomyces carlsbergensis (152) 787
Shafrir, E., see Biale, Y. (152) 28
Shah, S.N., Peterson, N.A. and McKean, C.M.
Inhibition of in vitro sterol biosynthesis by phenylalanine (164) 604
Shah, V.C. and Hughes, W.L.
Effect of deoxyribonuclease on newly formed DNA (161) 261
Shank, R.C.
Effect of cycasin on protein synthesis (166) 578
Shapiro, S.K., see Salvatore, F. (158) 461
Shapot, V.S., see Davidova, S.Y. (158) 303
Shapot, V.S., see Tulegenova, L.S. (166) 265
Shapot, V.S., see Vornovitskaja, G.I. (166) 596
Sharp, G.W.G., see Davies, H.E.F. (150) 315
Sharp, G.W.G., see Falchuk, M.Z. (153) 706
Sharp, G.W.G., see Kirchberger, M.A. (165) 22
Sharp, P., see Bassham, J.A. (153) 898
Shavit, N., see Dilley, R.A. (162) 86
Shaw, D.C., see Bell, K. (154) 284
Shaw, N.
The lipid composition of Microbacterium lacticum (152) 427
Shaw, N.
The detection of lipids on thin-layer chromatograms with the periodate-Schiff reagents (164) 435
Shaw, T.I., see Baker, P.F. (163) 560
Sheehan, G., see Hopkins, S.M. (164) 272
Sheehan, G., see Lyman, R.L. (152) 197
Sheikh, M.I. and Møller, J.V.
Binding of urate to proteins of human and rabbit plasma (158) 456
Sherman, F., see Gilmore, R.A. (161) 270
Sherman, W.R., Steward, M.A., Kurien, M.M. and Goodwin, S.L.
The measurement of myo-inositol, myo-inosose-2 and scyllo-inositol in mammalian tissues (158) 197
Shetlar, M.R., see Cahill, C.L. (154) 40
Shibakawa, R., see Price, C.C. (166) 327
Shibata, H., see Wada, F. (162) 518
Shibata, K., see Nakaya, K. (161) 23
Shibata, K., see Yamashita, K. (162) 610
Shimazu, T. and Amakawa, A.
Regulation of glycogen metabolism in liver by the autonomic nervous system. II. Neural control of glycogenolytic enzymes (165) 335
Shimazu, T. and Amakawa, A.
Regulation of glycogen metabolism in liver by the autonomic nervous system. III. Differential effects of sympathetic-nerve stimulation and of catecholamines on liver phosphorylase (165) 349
Shimizu, A., see Hayashi, A. (168) 262
Shimizu, B., see Nishimura, T. (157) 221
Shimizu, M., Golub, L. and Glimcher, M.
The effect of lathyrogens on the rate of collagen fibril formation and dissolution (168) 356
Shimizu, S., see Tamao, Y. (151) 260
Shimonishi, Y. und Zahn, H.
Trennung der S-Sulfonate des Schweineinsulins an DEAE-Sephadex A-25 (154) 598
Shimoyama, M., see Saxton, R.E. (156) 77
Shimura, K., see Fukazawa, C. (154) 618
Shimura, K., see Ishihara, H. (166) 496
Shinitzky, M., see Burstein, Y. (160) 141
Shinoda, T. and Glassman, E.
Multiple molecular forms of xanthine dehydrogenase and related enzymes. II. Conversion of one form of xanthine dehydrogenase to another by extracts of Drosphila melanogaster (160) 178
Shipley, G.G., see Chapman, D. (163) 255
Shishiyama, J., see Tani, T. (161) 309
Shoemaker, R.L., see Sachs, G. (162) 210
Shorland, F.B., see Hansen, R.P. (152) 642
Shoshan, S. and Finkelstein, S.
Studies on collagen crosslinking in vivo (154) 261
Shropshire, Jr., W., see Correll, D.L. (168) 36
Shropshire, Jr., W., see Correll, D.L. (168) 46
Shugart, L., Novelli, G.D. and Stulberg, M.P.
Isolation and properties of undermethylated phenylalanine transfer ribonucleic acids from a relaxed mutant of Escherichia coli (157) 83
Shurin, S.B., see Kessel, D. (163) 179
Šicho, V. and Králová, B.
Effect of antivitamins on the microbiological biosynthesis of vitamins. III. Relation between amounts of thiamine, thiamine monophosphate and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (165) 459
Siegelman, H.W., see Chapman, D.J. (153) 692
Sigel, H., see Erlenmeyer, H. (157) 637
Siimes, M., see Jänne, J. (166) 419
Sikorska, E.J., see Simkin, J.L. (170) 422
Silberberg, V.L. and Hadorn, B.
Identification of pancreatic enzymes in human duodenal contents (167) 616
Silberberg, V.L., see Hadorn, B. (151) 702
Silbert, J.E., see Lipson, M.J. (158) 344
Siliprandi, N., see Ciman, M. (162) 164
Siliprandi, N., see Pinna, L.A. (159) 563
Simic, M., see Scholes, G. (166) 255
Simkin, J.L., Sikorska, E.J., Jamieson, J.C. and Sargent, A.A.
Biosynthesis of glycoproteins by a cell-free microsome system from guinea pig liver (170) 422
Simmons, P., see Brandt, I.K. (167) 196
Simo, C., Javaherian, K. and Fabry, T.L.
Preparation of mesoporphyrin IX and copper and manganese mesoporphyrin complexes of apohemoglobin (160) 118
Simon, E.J., see Sentenac, A. (161) 299
Simonnet, F., see Chevallier, F. (164) 339
Simons, R., see Coster, H.G.L. (163) 234
Simukova, N.A., see Budowsky, E.I. (166) 755
Sinclair, A.J. and Collins, F.D.
Fatty livers in rats deficient in essential fatty acids (152) 498
Singh, H. and Keller, D.
Studies of wheat-embryo rRNA. I. Behavior on methylated albumin kieselguhr columns (169) 150
Sinsheimer, R.L., see Komano, T. (155) 295
Sippel, A. and Hartmann, G.
Mode of action of rifamycin on the RNA polymerase reaction (157) 218

Sjöberg, L. B. and Feeney, R. E.
Reduction and reoxidation of turkey ovomucoid – a protein with dual and independent inhibitory activity against trypsin and α-chymotrypsin (168) 79
Sjogren, R. E., see Weller, D. L. (168) 576
Sjövall, J., see Cronholm, T. (152) 233
Sjövall, J., see Ellingboe, J. (152) 803
Skinner, H. C. W., see Pak, C. Y. C. (165) 274
Skipski, V. P., Good, J. J., Barclay, M. and Reggio, R. B.
Quantitative analysis of simple lipid classes by thin-layer chromatography (152) 10
Škoda, J., see Santilli, V. (155) 623
Škrinjarić-Špoljar, M. and Reiner, E.
Hydrolysis of diethyl-p-nitrophenylphosphate and ethyl-p-nitrophenyl-ethylphosphonate by human sera (165) 289
Škvařil, F., see Franěk, F. (160) 321
Slater, D. W. and Spiegelman, S.
Template capabilities and size distribution of echinoid RNA during early development (166) 82
Slater, E. C., see Amons, R. (162) 452
Slater, E. C., see De Vijlder, J. J. M. (167) 23
Slater, E. C., see Muraoka, S. (162) 170
Slater, E. C., see Vallejos, R. H. (153) 509
Slater, E. C., see Veldsema-Currie, R. D. (162) 310
Slifkin, M. A., see Heathcote, J. G. (153) 13
Slifkin, M. A., see Heathcote, J. G. (158) 167
Sloane, N. H. and Smith, S. C.
Hydroxymethylation of the benzene ring. IV. p-Hydroxymethyl-L-phenylalanine, a naturally occurring amino acid in Escherichia coli: Identification and biochemical properties (158) 394
Slotboom, A. J., see Lesslauer, W. (150) 306
Slotboom, A. J., see Van den Bosch, H. (152) 694
Slotboom, A. J., see Van den Bosch, H. (164) 215
Sluyser, M.
Interaction of carcinogens with histones in vitro (154) 606
Sluyterman, L. AE.
The rate-limiting reaction in papain action as derived from the reaction of the enzyme with chloroacetic acid (151) 178
Smearing, R. W., see Carstensen, E. L. (156) 394
Smeaton, J. R., see May, B. K. (169) 260
Smit, E. M., see Ruttenberg, G. J. C. M. (157) 429
Smith, Jr., C. R., see Mikolajczak, K. L. (152) 244
Smith, E. J.
Occurrence of UDP-N-acetylhexosaminuronic acid in a mutant strain of Achromobacter georgiopolitanum n sp. (158) 470
Smith, I. and Segal, S.
The influence of size of rat kidney cortex slices on the accumulation of amino acids (163) 281
Smith, I., see Lowenstein, L. M. (150) 73
Smith, I., see Lowenstein, L. M. (150) 416
Smith, Jr., J. G. and Davidson, E. A.
Acid glycosaminoglycans in fetal pig epidermis (165) 182
Smith, J. K. and Whitby, L. G.
The heterogeneity of prostatic acid phosphatase (151) 607
Smith, K. C. and O'Leary, M. E.
The pitfalls of measuring DNA synthesis kinetics as exemplified in ultraviolet radiation studies (169) 430
Smith, L., see Ramirez, J. (153) 466
Smith, L., see Scholes, P. B. (153) 350
Smith, L., see Scholes, P. B. (153) 363
Smith, Jr., L. H., see Efron, M. L. (165) 238
Smith, L. L., see Tan, L. (152) 758
Smith, L. L., see Tan, L. (164) 389
Smith, M. B.
The isolation of a large peptide from denatured plakalbumin (154) 263
Smith, M. E.
The turnover of myelin in the adult rat (164) 285
Smith, M. G., see Carter, B. J. (166) 735
Smith, R. A., see Rothschild, M. L. (169) 218
Smith, S. C., see Sloane, N. H. (158) 394
Smith, T. A., see Krongelb, M. (167) 473
Smithee, G. A., see Bottomley, S. S. (159) 27
Smyth, D. G. and Tuppy, H.
Acylation reactions with cyclic imides (168) 173
Snatzke, G., see Luck, G. (169) 548
Snoswell, A. M. and Cox, G. B.
Piericidin A and inhibition of respiratory chain activity in Escherichia coli K12 (162) 455
Snoswell, A. M., see Cox, G. B. (153) 1
Snyder, F. and Piantadosi, C.
Deacylation of isomeric diacyl [1-^{14}C]alkoxyglycerols by pancreatic lipase (152) 794
Snyder, T. L., see Stenesh, J. (161) 442
So, L. L. and Goldstein, I. J.
Protein-carbohydrate interaction. XX. On the number of combining sites on concanavalin A, the phytohemagglutinin of the jack bean (165) 398
Soffer, R. L.
The arginine transfer reaction (155) 228
Soffer, R. L.
Studies on the incorporation of radioactivity from [^{14}C]glutamic acid by soluble extracts of thyroid particles (155) 241
Soffer, R. L.
Incorporation of radioactivity from monoiodotyrosine by soluble systems (155) 536
Söling, H. D. and Appels, A.
Effects of L-carnitine on utilization of ketone bodies and glucose in eviscerated, nephrectomized rats (158) 162
Söll, D., see Roy, K. L. (161) 572
Solowjeva, A. A., see Davidova, S. Y. (158) 303
Soltys, P., see Portman, O. W. (167) 610
Somogyi, J.
The effect of proteases on the $(Na^+ + K^+)$-activated ATPase system of rat brain (151) 421
Song, C. S., Nisselbaum, J. S., Tandler, B. and Bodansky, O.
Partial solubilization of protein and 5'-nucleotidase from microsomal membranes of the rat liver by ultrasonic irradiation (150) 300
Sörbo, B. and Lundberg, B.
Radiolysis of 4-thiouracil and of the 4-thiouracil moieties of 4-thiouridine and transfer RNA from Escherichia coli in aqueous solutions (157) 445
Sørensen, H., see Larsen, P. O. (156) 190
Šorm, F., see Čihák, A. (166) 277
Šorm, F., see Grünberger, D. (157) 439
Šorm, F., see Grünberger, D. (161) 147
Šorm, F., see Holý, A. (161) 264
Šorm, F., see Mirzabekov, A. D. (166) 75
Šorm, F., see Pačes, V. (161) 352
Šorm, F., see Santilli, V. (155) 623
Sova, V. V., see Elyakova, L. A. (167) 462
Sowa, J. R., see Price, C. C. (166) 327
Spadoni, M. A., see Cammarano, P. (155) 302
Spaziani, E., see Mills, T. M. (150) 435

Spencer, D., see Whitfeld, P. R. (157) 333
Spencer, J. H., see Černý, R. (169) 439
Spencer, T. E., see Brewer, J. M. (168) 359
Spener, F., Paltauf, F. and Holasek, A.
The intestinal absorption of glycerol trioctadecenyl ether (152) 368
Sperelakis, N., see Henn, F. A. (163) 415
Sperling, R. and Steinberg, I. Z.
Polarimetric assay of the activity of ribonuclease on cyclic nucleotides (159) 408
Spiegelman, S., see Slater, D. W. (166) 82
Spiegler, P., see Vegh, K. (163) 266
Spitzer, H. L., Morrison, K. and Norman, J. R.
The incorporation of L-[Me-^{14}C]methionine and [Me-^{3}H]choline into lung phosphatides (152) 552
Spolter, P. D. and Vogel, J. M.
Rat-liver thiol: protein-disulphide oxidoreductase (167) 525
Sprecher, H.
The synthesis and metabolism of hexadeca-4,7,10-trienoate, eicosa-8,11,14-trienoate, docosa-10,13,16-trienoate and docosa-6,9,12,15-tetraenoate in the rat (152) 519
Spydevold, Ø. and Borrebaek, B.
Association of epididymal adipose tissue hexokinase with subcellular structure (167) 291
Squire, P. G. and Ottesen, M.
Human pituitary growth hormone. XVII. The hydrogen-deuterium exchange of the hormone (154) 226
Sribney, M., see Lande, S. (154) 429
Srivastava, B. I. S.
Acceleration of senescence and of the increase of chromatin-associated nucleases in excised barley leaves by abscisin II and its reversal by kinetin (169) 534
Stacey, K. A., see Atkinson, C. (166) 705
Stackhouse, H. L., Chetsanga, C. J. and Tan, C. H.
The effect of cortisol on genetic transcription in rat-liver chromatin (155) 159
Staehelin, M., see Wehrli, W. (157) 215
Stagni, N. and De Bernard, B.
Lysosomal enzyme activity in rat and beef skeletal muscle (170) 129
Stahl, W. L. and Trams, E. G.
Formation of S-acyl pantetheine from acyl-coenzyme A by plasma membranes (163) 472
Stahl, W. L., see Trams, E. G. (163) 459
Staib, F., see Remold, H. (167) 399
Stanacev, N. Z., Isaac, D. C. and Brookes, K. B.
The enzymatic synthesis of phosphatidylglycerol in sheep brain (152) 806
Stanners, C. P., see Taylor, J. M. (155) 424
Stanworth, D. R., see Henney, C. S. (154) 295
Stastney, M., see Cohen, S. (166) 427
States, B. and Segal, S.
Development aspects of cystine transport in rat intestinal segments (163) 154
Steen, G. O., see Karlsson, K.-A. (152) 798
Steers, Jr., E., see Correll, D. L. (168) 46
Steffensen, D. M., see Gray, R. H. (157) 344
Stein, O., see Eisenberg, S. (164) 205
Stein, Y., see Eisenberg, S. (164) 205
Steinberg, I. Z., see Sperling, R. (159) 408
Steinbuch, M., Pejaudier, L., Quentin, M. and Martin, V.
Molecular alternation of α$_2$-macroglobulin by aliphatic amines (154) 228
Steinhart, J. R.
Colorimetric assay of acetylcholine by gallocyanine (158) 171
Stellwagen, R. H., Reid, B. R. and Cole, R. D.
Degradation of histones during the manipulation of isolated nuclei and deoxyribonucleoprotein (155) 581
Stellwagen, R. H., see Reid, B. R. (155) 593
Stenesh, J., Roe, B. A. and Snyder, T. L.
Studies of the DNA from mesophilic and thermophilic bacteria (161) 442
Stenman, U.-H., see Gräsbeck, R. (158) 292
Stepanov, V. M., Lobareva, L. S. and Mal'tsev, N. I.
Coloured inhibitors of pepsin (151) 719
Steven, F. S. and Jackson, D. S.
Isolation and amino acid composition of insoluble elastin. Bovine foetal and adult aorta and ligamentum nuchae (168) 334
Steven, F. S., Jackson, D. S. and Broady, K.
Proteins of the human intervertebral disc. The association collagen with a protein fraction having an unusual amino acid composition (160) 435
Steven, F. S., see Freeman, I. L. (154) 252
Stevens, E. and Frydman, B.
Isolation and properties of wheat germ uroporphyrinogen III cosynthetase (151) 429
Stevens, E., Frydman, R. B. and Frydman, B.
Separation of porphobilinogen deaminase and uroporphyrinogen III cosynthetase from human erythrocytes (158) 496
Stevens, E., see Frydman, R. B. (165) 167
Stevenson, F. K.
The viscosity of Tamm-Horsfall mucoprotein (160) 299
Stewart, B. W. and Rienits, K. G.
Light-triggered, thiol-dependent ADP-ATP exchange activity in spinach chloroplasts (153) 907
Stewart, J. W., see Gilmore, R. A. (161) 270
Stewart, M. A., see Sherman, W. R. (158) 197
Stifel, F. B., Rosensweig, N. S., Zakim, D. and Herman, R. H.
Dietary regulation of glycolytic enzymes. I. Adaptive changes in rat jejunum (170) 221
Stifel, F. B., see Rosensweig, N. S. (170) 228
Stiles, J. W., Wilson, J. T. and Crane, F. L.
Membranifibrils in cristae and grana (162) 631
Stirling, J. L., see Robinson, D. (170) 420
Stoffyn, A., Stoffyn, P. and Martensson, E.
Structure of kidney ceramide dihexoside sulfate (152) 353
Stoffyn, P., see Stoffyn, A. (152) 353
Stokke, O.
α-Oxidation of a β-methyl-substituted fatty acid in guinea-pig liver mitochondria (152) 213
Stoll, U., see Mazliak, P. (152) 414
Stone, A. J.
A proposed model for the sodium pump (150) 578
Stonehill, E. H. and Huppert, J.
Ribonuclease activity associated with mammalian cell walls (155) 353
Stratman, S. L., see Day, W. C. (167) 597
Strauss, B. S. and Robbins, M.
DNA methylated in vitro by a monofunctional alkylating agent as a substrate for a specific nuclease from Micrococcus lysodeikticus (161) 68
Strickland, E. H.
Circular dichroism of horseradish peroxidase and its enzyme-substrate compounds (151) 70
Strickland, J. E. and Miller, O. N.
Inhibition of glycerol dehydrogenase from

Aerobacter aerogenes by dihydroxyacetone, high ionic strength, and monovalent cations (159) 221
Strickland, K. P., see Possmayer, F. (164) 79
Strzelecka-Golaszewska, H. and Drabikowski, W.
Studies on the exchange of G-actin-bound calcium with bivalent cations (162) 581
Stulberg, M. P., see Shugart, L. (157) 83
Stutz, E. and Rawson, J. R.
Selective deproteinization of ribosomes by sodium dodecyl sulfate (161) 564
Subirana, J. A., see Cozcolluela, C. (154) 242
Subramanian, K. N., Padmanaban, G. and Sarma, P. S.
Regulation of nitrate reductase and catalase by amino acids in Neurospora crassa (151) 20
Subramanian, K. N. and Sarma, P. S.
Effect of nitrogen source on cobalt toxicity in Neurospora crassa (156) 199
Suematsu, T., see Koizumi, T. (151) 628
Sugai, M. and Matsuda, I.
The effect of vitamin D on transport of L-histidine by intestine (170) 474
Sugano, M., Yamamoto, I., Hori, K., Cho, S. and Wada, M.
Effects of ethionine on the structure of liver triglycerides (152) 781
Sugimura, T., Fujimura, S., Nagao, M., Yokoshima, T. and Hasegawa, M.
Reaction of N-methyl-N′-nitro-N-nitrosoguanidine with protein (170) 427
Sugita, M., see Hori, T. (152) 211
Sugita, Y., Kise, T., Dohi, Y. and Yoneyama, Y.
The hemoglobin of unfertilized egg of Bufo vulgaris japonicus (160) 291
Sugiura, N., see Kotaki, A. (151) 689
Sugiura, N., see Yagi, K. (151) 343
Sugiura, N., see Yagi, K. (159) 1
Sugiyama, K., see Koga, T. (158) 144
Sugiyama, K., see Mukasa, H. (168) 132
Suhar, A., see Furlan, M. (167) 154
Sukhareva, B. S., see Tikhonenko, A. S. (167) 476
Sulkowski, E. and Laskowski, Sr., M.
Degradation of thymus DNA and crab poly d(A-T) by micrococcal nuclease in the presence of actinomycin D (157) 207
Sümegi, J., Damjanovich, S. and Csaba, B.
The effect of 5-hydroxytryptamine on glycogen phosphorylase (159) 545
Summaria, L., see Groskopf, W. R. (168) 376
Summer, G. K., see Waters, M. D. (159) 420
Summers, W. C. and Szybalski, W.
Size, number and distribution of poly G binding sites on the separated DNA strands of coliphage T7 (166) 371
Summers, W. P. and Mueller, G. C.
Properties of RNA synthesis in HeLa nuclei by Micrococcus lysodeikticus or endogenous RNA polymerase (169) 316
Sun, F. F., Prezbindowski, K. S., Crane, F. L. and Jacobs, E. E.
Physical state of cytochrome oxidase: Relationship between membrane formation and ionic strength (153) 804
Sundaresan, P. R. and Therriault, D. G.
Metabolism of [^{14}C]retinoic acid in the retinol-deficient rat (158) 92
Sussman, H. H. and Laga, E.
Inorganic pyrophosphatase activity of human placental alkaline phosphatase (151) 281
Sussman, H. H., see Gottlieb, A. J. (160) 167
Sutter, A., see Russel, D. W. (170) 210
Sutton, A. M., see Rosen, D. (163) 226
Suyama, Y., see Michelson, E. L. (157) 200
Suzue, G., Tsukada, K. and Tanaka, S.
Occurrence of dehydrosqualene (C$_{30}$ phytoene) in Staphylococcus aureus (164) 88
Suzuki, K., Poduslo, J. F. and Poduslo, S. E.
Further evidence for a specific ganglioside fraction closely associated with myelin (152) 576
Suzuki, N., see Yoshino, M. (167) 216
Suzuki, R., see Sato, K. (165) 189
Suzuki, S., Hachimori, Y. and Matoba, R.
Introduction of sulfhydryl groups into Taka-amylase A and changes in enzymic activity (167) 641
Suzuki, T., see Fujikawa, K. (161) 232
Suzuki, T., see Fujikawa, K. (169) 520
Suzuki, T., see Hayashi, A. (168) 262
Suzuki, T., see Yang, C. C. (168) 373
Švejcar, J.
The content of glycosaminoglycans (mucopolysaccharides) in mouse fetus and placenta (165) 84
Svendsen, I., see Ogata, K. (159) 403
Svensson, I.
Studies on methionyl-tRNA synthetase. III. Enzyme dependence for maximum methionyl-tRNA formation (167) 179
Swain, R. R., see Dekker, E. E. (158) 306
Swallow, A. J., see Land, E. J. (162) 327
Swann, D. A.
Studies on hyaluronic acid. I. The preparation and properties of rooster comb hyaluronic acid (156) 17
Swann, D. A.
Studies on hyaluronic acid. II. The protein component(s) of rooster comb hyaluronic acid (160) 96
Swann, P. F., see Lawley, P. D. (157) 646
Swanson, R. F., Curry, W. M. and Anker, H. S.
The activation of rat liver acetyl-CoA carboxylase by incubation (159) 390
Swell, L., Cooper Bell, Jr., C. and Entenman, C.
Bile acids and lipid metabolism. III. Influence of bile acids on phospholipids in liver and bile of the isolated perfused dog liver (164) 278
Swetly, P., see Tuppy, H. (153) 293
Swislocki, N. I.
Growth hormone effects on histidine incorporation into protein by adipose tissue from hypophysectomized rats (169) 556
Sy, J. and McCarty, K. S.
Ribosomal RNA of Arbacia punctulata (166) 571
Sykes, J. and Young, T. W.
Studies on the ribosomes and ribonucleic acids of Aerobacter aerogenes grown at different rates in carbon-limited continuous culture (169) 95
Sykes, J., see Young, T. W. (169) 117
Symons, R. H.
Modified procedure for the synthesis of ^{32}P-labelled ribonucleoside 5′-monophosphates of high specific activity (155) 609
Symons, R. H., see Harris, R. J. (161) 291
Syrett, P. J. and John, P. C. L.
Isocitrate lyase: Determination of K$_m$ values and inhibition by phosphoenolpyruvate (151) 295
Szybalski, W., see Summers, W. C. (166) 371

T

Tagawa, K. and Arnon, D. I.
Oxidation-reduction potentials and stoichiometry of electron transfer in ferredoxins (153) 602
Tager, J. M., see De Haan, E. J. (153) 98
Tager, J. M., see Graafmans, W. D. J. (153) 916
Tager, J. M., see Papa, S. (153) 303
Tahori, A. S., see Zahavi, M. (153) 787
Takahashi, H., see Ichihara, A. (167) 274
Takahashi, H., see Kanegasaki, S. (152) 40
Takahashi, I., see Yamagishi, H. (155) 150
Takahashi N., see Fukuda, M. (159) 215
Takahashi, T. and Liener, I. E.
Isolation and composition of a glycopeptide from a phytohemagglutinin of Phaseolus vulgaris (154) 560
Takahashi, T., see Nohara, H. (154) 529
Takahashi, T., see Schmid, H. H. O. (164) 141
Takaku, F., see Ono, T. (161) 361
Takamiya, A., see Ikegami, I. (162) 604
Takeda, I.
Species specificity of L-histidine acceptor transfer RNA from microbes (169) 272
Takeda, Y., see Daikuhara, Y. (158) 51
Takeguchi, C. A. and Yamamoto, H. Y.
Light induced $^{18}O_2$ uptake by epoxy xanthophylls in New Zealand spinach leaves (Tetragonia expansa) (153) 459
Takemoto, C., Nakano, H., Sato, H. and Tamaoki, B.
Fate of molecular oxygen required by endocrine enzymes for the side-chain cleavage of cholesterol (152) 749
Takemoto, C., see Nakano, H. (152) 186
Takenaka, O., see Nakaya, K. (161) 23
Takeshita, M., see Iwai, H. (167) 302
Tal, M.
On the role of Zn^{2+} and Ni^{2+} in ribosome structure (169) 564
Tamao, Y., Morikawa, Y., Shimizu, S. and Fukui, S.
Coenzyme activity of 5'-deoxyadenosyl-10-chlorocobalamin in propanediol dehydratase system (151) 260
Tamaoki, B., see Nakano, H. (164) 585
Tamaoki, B., see Takemoto, C. (152) 749
Tamaoki, T., Miyazawa, F., Nakamura, K. and Scrimger, J. W.
Effect of γ-irradiation on Escherichia coli ribosomes: Reversible dissociation (157) 655
Tamaoki, T., see Miyazawa, F. (155) 193
Tamaoki, T., see Nakamura, T. (161) 368
Tamburro, A. M., Scatturin, A. and Moroder, L.
Far-ultraviolet optical rotatory dispersion and dichroism studies of bovine pancreatic ribonuclease (154) 583
Tamiya, N., see Fujimoto, D. (167) 407
Tamiya, N., see Yagi, T. (153) 699
Tamura, G., see Arima, K. (163) 121
Tan, C. H., see Stackhouse, H. L. (155) 159
Tan, L. and Smith, L. L.
Microbial hydroxylations. II. Oxidative cleavage of the 17β-acetyl side-chain of progesterone by Aspergillus ochraceus (152) 758
Tan, L. and Smith, L. L.
Microbial hydroxylations. III. 11α-Hydroxylation of some 3α,5α-cyclopregnane derivatives (164) 389
Tan, Y. H., see Bowness, J. M. (151) 288
Tanahashi, N., Brodbeck, U. and Ebner, K. E.
Enzymic and immunological activity of various B proteins of lactose synthetase (154) 247
Tanaka, A., see Koga, T. (158) 144
Tanaka, K., Orr, J. C. and Isselbacher, K. J.
Identification of β-hydroxyisovaleric acid in the urine of a patient with isovaleric acidemia (152) 638
Tanaka, M., see Aoki, K. (160) 368
Tanaka, S., see Suzue, G. (164) 88
Tandler, B., see Song, C. S. (150) 300
Tang, C. L., see Hsiao, T. C. (157) 640
Tang, G. and Common, R. H.
Urinary conversion products of certain orally administered isoflavones in the fowl (158) 402
Tani, J., see Fukuyama, K. (155) 611
Tani, T., McFadden, B. A., Homann, H. R. and Shishiyama, J.
Aspects of polymerization catalyzed by RNA polymerase from Pseudomonas indigofera (161) 309
Tani, Y., see Ogata, K. (165) 578
Taniguchi, K., see Kakimoto, Y. (156) 374
Tannenbaum, S. R., see Miller, S. A. (152) 511
Tanooka, H.
Ultraviolet resistance of DNA in spore spheroplasts of Bacillus subtilis as measured by the transforming activity (166) 581
Tanooka, H. and Sakakibara, Y.
Radioresistant nature of the transforming activity of DNA in bacterial spores (155) 130
Tappel, A. L., see Beck, C. (151) 159
Tappel, A. L., see Weinreb, N. J. (159) 141
Tarutani, O., see Nakano, M. (168) 156
Tashima, Y., see Mizuno, N. (168) 311
Tasseron-de Jong, J. G., see Bezemer-Sybrandy, S. M. (161) 568
Tate, R., see Betterton, H. (170) 459
Tatum, E. L., see Crocken, B. (156) 1
Tavitian, A., Uretsky, S. C. and Acs, G.
Selective inhibition of ribosomal RNA synthesis in mammalian cells (157) 33
Taylor, B. F.
Oxidation of elemental sulfur by an enzyme system from Thiobacillus neapolitanus (170) 112
Taylor, E. W., see Cassim, J. Y. (168) 463
Taylor, J. M. and Stanners, C. P.
The synthesis of RNA by mammalian cells treated with the aminonucleoside of puromycin (155) 424
Taylor, K., see Newsholme, E. A. (158) 11
Tazawa, M., see Hatano, S. (154) 507
Tecson, J., see Grisolia, S. (151) 367
Tedeschi, H., see Kodama, R. M. (163) 277
Telegdi, M.
The mechanism of action of rabbit muscle α-glycerophosphate dehydrogenase (159) 227
Terayama, H., see Ono, H. (166) 175
Terayama, H., see Ono, T. (161) 361
Terpstra, W.

Interaction of a spinach protein factor with bacteriochlorophyll (153) 675
Terrell, E. B., see Regen, D. M. (170) 95
Terzi, M., see Colvill, A. J. E. (155) 394
Thaker, I. H., see Horner, W. H. (165) 306
Therriault, D. G., see Sundaresan, P. R. (158) 92
Thier, S. O.
Amino acid accumulation in the toad bladder: Relationship to transepithelial sodium transport (150) 253
Thirion, J-P. and Kaesberg, P.
Sequence determination of oligonucleotides obtained from pancreatic ribonuclease digests of M12 and R17 RNA's (161) 247
Thoai, N. V., see Olomucki, A. (151) 353
Thoai, N. V., see Pradel, L.-A. (154) 305
Thoai, N. V., see Roustan, C. (167) 326
Thomas, A. V., see Boyd, C. A. R. (150) 723
Thomas, G. A., see Erdmann, V. A. (157) 43
Thomas, J. B. and Nijhuis, H. H.
Relative stability of chlorophyll complexes in vivo (153) 868
Thompson, C. M. and Whittingham, C. P.
Glycollate metabolism in photosynthesising tissue (153) 260
Thompson, Jr., G. A.
The biosynthesis of ether-containing phospholipids in the slug, Arion ater. III. Origin of the vinylic ether bond of plasmalogens (152) 409
Thompson, J. E., Coleman, R. and Finean, J. B.
Comparative X-ray diffraction and electron microscope studies of isolated mitochondrial membranes (150) 405
Thorell, B., see Kohen, E. (158) 185
Thorell, B., see Kohen, E. (167) 635
Thorne, S. W., see Anderson, J. M. (162) 122
Thorne, S. W., see Boardman, N. K. (153) 448
Thorun, W. and Mehl, E.
Determination of molecular weights of microgram quantities of protein components from biological membranes and other complex mixtures: Gel electrophoresis across linear gradients of acrylamide (160) 132
Thunell, S., see Olsson, I. (165) 309
Tichonicky, L., see Kruh, J. (161) 215
Tidwell, H. C., see Pawar, S. S. (164) 167
Tieckelmann, H., see Torrence, P. F. (158) 183
Tien, H. T., see Ting, H. P. (163) 439
Tiezzi, E., see Woolum, J. C. (160) 311
Tigier, H. A., Batlle, A. M. del C. and Locascio, G.
Porphyrin biosynthesis in soybean callus tissue system. Isolation, purification and general properties of δ-aminolaevulinate dehydratase (151) 300
Tikchonenko, T. I., see Nikolskaya, I. I. (155) 626
Tikhonenko, A. S., Sukhareva, B. S. and Braunstein, E. A.
Electron-microscopic investigation of Escherichia coli glutamate decarboxylase (167) 476
Timofeeva, M. J., see Kafiani, C. A. (169) 274
Timpl, R., Wolff, I. and Weiser, M.
A new class of structural proteins from connective tissue (168) 168
Ting, H. P., Huemoeller, W. A., Lalitha, S., Diana, A. L. and Tien, H. T.
Properties of black lipid membranes of chloroplast pigments (163) 439
Ting, I. P., see Mukerji, S. K. (167) 239
Tinoco, J., Babcock, R., McIntosh, D. J. and Lyman, R. L.
The distribution of methyl label into molecular species of liver lecithins from female rats injected with [Me-^{14}C]methionine (164) 129
Tinoco, J., see Lyman, R. L. (152) 197
Tipton, K. F.
The inhibition of yeast alcohol dehydrogenase by 2-bromo-2-phenylacetaldehyde (151) 692
Tipton, K. F.
The prosthetic groups of pig brain mitochondrial monoamine oxidase (159) 451
Tischer, R. G., Bostwick, C. D., Mickelson, J. C. and Brown, L. R.
The electrodialysis of Anabaena flos-aquae A-37 (156) 403
Tisue, G. T., see Sandermann, Jr., H. (165) 550
Titus, E., see Chignell, C. F. (159) 345
Tkatcheva, Z. G., see Nikolskaya, I. I. (155) 626
Tobias, P. S., see Cassim, J. Y. (168) 463
Tochikura, T., see Ogata, K. (165) 578
Tofft, M., see Lindstedt, G. (158) 503
Tokimatsu, H. Kagawa, H., Fukutome, H. and Kawade, Y.
Ultraviolet inactivation of Escherichia coli ribosomes. II. Effects of messenger RNA binding on ultraviolet sensitivity of ribosomes (169) 363
Tokuyama, K.
Further studies on bacterial and liver tryptophan pyrrolases (151) 76
Tolberg, A. B., see Winocur, B. A. (150) 32
Tomaoki, B.-I., see Nakano, H. (152) 186
Toncic, P., see Day, W. C. (167) 597
Tonnies Gil Ferreira, K.
Anionic dependence of sodium transport in frog skin (150) 587
Topaly, V. P., see Liberman, E. A. (163) 125
Torralba, A., see Grisolia, S. (151) 298
Torralba, A., see Grisolia, S. (151) 367
Torrence, P. F. and Tieckelmann, H.
Thiamine biosynthesis. II. A novel biosynthetic transformation of the S-methyl moiety of methionine (158) 183
Torres, H. N., Marechal, L. R., Bernard, E. and Belocopitow, E.
Control of muscle glycogen phosphorylase activity by insulin (156) 206
Torresani, J., see Valenta, L. (168) 507
Towe, K. M., see Correll, D. L. (168) 46
Townsley, J. D., see Brodie, H. J. (152) 770
Trams, E. G., Stahl, W. L. and Robinson, J.
Synthesis of lipids by liver plasma membranes. Incorporation of acyl-coenzyme A derivatives into membrane lipids in vitro (169) 459
Trams, E. G., see Stahl, W. L. (163) 472
Trávniček, M.
RNA with amino acid-acceptor activity isolated from an oncogenic virus (166) 757
Treadwell, C. R., see Kao, K-Y. T. (151) 568
Triant, J. W., see Pronczuk, A. W. (157) 204
Troll, W., Delman, S., Baerkowitz, E., Chmielewicz, Z. F., Ambrus, J. L. and Bardos, T. J.
Differential responses of DNA and RNA polymerase to modifications of the template rat liver DNA caused by action of the carcinogen acetylaminofluorene in vivo and in vitro (157) 16
Trosper, T. and Sauer, K.
Chlorophyll a interactions with chloroplast lipids in vitro (162) 97
Try, K., see Eldjarn, L. (164) 94
Tsou, C. S., see Van Dam, K. (162) 301
Tsuboi, K. K.
Actin and bound nucleotide stoichiometry (160) 420

Tsuboi, M., see Higuchi, S.(166) 717

Tsuiki, S., see Sato, K.(159) 130

Tsuiki, S., see Sato, K.(165) 189

Tsukada, K., Oura, H., Nakashima, S. and Hayasaki, N.
Adaptive response of tryptophan pyrrolase and tyrosine transaminase in rat liver after partial hepatectomy and laparotomy (165) 218

Tsukada, K., see Suzue, G.(164) 88

Tsukagoshi, N., see Arima, K.(163) 121

Tsunemi, T., see Daikuhara, Y.(158) 51

Tsurufuji, S., see Ishibashi, S.(165) 296

Tsutsumi, Y., see Nakano, M.(167) 9

Tsuzuki, J. and Naora, H.
Protein synthesis in isolated rat spleen nuclei (169) 550

Tuček, S.
Motor nerve and the activity of choline acetyltransferase in the skeletal muscle (170) 457

Tulegenova, L. S., Rodionova, N. P. and Shapot, V. S.
Chemical fractionation of microsomes and metabolic activity of membrane RNA from rat liver (166) 265

Tung, K. K. and Nordin, J. H.
Structure of the tetrasaccharide produced by the hydrolysis of nigeran by the enzyme mycodiextranase (158) 154

Tuppy, H. and Swetly, P.
Binding of nucleotides to "structural protein" of wild-type and respiration-deficient yeast mitochondria (153) 293

Tuppy, H., see Smyth, D. G.(168) 173

Turbeck, B. O., Nedergaard, S. and Kruse, H.
An anion-stimulated ATPase from the potassium transporting midgut of the larva of Hyalophora cecropia (163) 354

Turbeck, B. O., see Magid, E.(165) 515

Turkington, R. W.
Inhibition of casein turn-over by hydrocortisone during mammary gland differentiation in vitro (158) 274

Turkki, P. R. and Glenn, J. L.
Acylation of lysophosphatidylethanolamine by soluble enzyme(s) released from mitochondria after sonication (152) 104

Turner, J. M., see Cox, N.(170) 438

Turner, J. M., see Lowe, D. A.(170) 455

Turpin, A., see Mangalo, R.(168) 583

Tyler, A., see Castañeda, M.(166) 741

Tyrsted, G. and Sartorelli, A. C.
Inhibition of the synthesis of 5-phosphoribosyl-1-pyrophosphate by 3'-deoxyadenosine and structurally related nucleoside analogs (155) 619

Tzivoni, D., see Ilani, A.(163) 429

U

Ubuka, T., Kobayashi, K., Yao, K., Kodama, H., Fujii, K., Hirayama, K., Kuwaki, T. and Mizuhara, S.
S-(2-Hydroxy-2-carboxyethylthio)cysteine and S-(carboxymethylthio)cysteine in human urine (158) 493
Uchida, Y., see Ogata, K. (165) 578
Udem, L., see Ranney, H. M. (160) 112
Uenoyama, H., Iizuka, T., Morimoto, H. and Kotani, M.
Paramagnetic anisotropy measurements on acid ferrimyoglobin and ferrimyoglobin fluoride (160) 159
Ui, M.
Multiple inhibitor sites for ATP on muscle phosphofructokinase as influenced by a change of pH: A computer analysis of "non-linear" kinetic data (159) 50
Ukita, T., see Yoshida, M. (157) 455
Ukita, T., see Yoshida, M. (157) 466
Ukita, T., see Yoshida, M. (166) 636
Ukita, T., see Yoshida, M. (166) 646
Umetani, K., see Urakami, C. (164) 64
Umezawa, H., see Mizuno, S. (157) 322
Unkeless, J., see Jangaard, N. O. (151) 225
Upadhyay, S. N. and Chattoraj, D. K.
Adsorption of nucleic acids at the alumina-water interface (161) 561
Urakami, C. and Umetani, K.
Compositions of phosphatides from Bacillus natto at various growth phases (164) 64
Uretsky, S. C., see Tavitian, A. (157) 33
Urivetzky, M., see Wiener, S. L. (166) 229
Ushijima, Y., see Nakano, M. (167) 9

V

Vacano, E., see Futterman, S.(164) 433
Vaghefi, S.S., see Evans, R.J.(164) 566
Valcourt, A. J., see Gabay, S.(159) 440
Valenta, L., Roques, M., Torresani, J., Rolland, M. and Lissitzky, S.
Human thyroglobulin: Physicochemical properties in relation to iodine content (168) 507
Vallée, M. et Jeanjean, R.
Le système de transport de SO$_4^{2-}$ chez Chlorella pyrenoidosa et sa régulation. I. Etude cinétique de la perméation (150) 599
Vallée, M. et Jeanjean, R.
Le système de transport de SO$_4^{2-}$ chez Chlorella pyrenoidosa et sa régulation. II. Recherches sur la régulation de l'entrée (150) 607
Vallejos, R.H., Van den Bergh, S.G. and Slater, E. C.
On coupling factors of oxidative phosphorylation (153) 509
Vallet, G., see Herbage, D.(168) 544
Vallin, I.
Respiratory control in submitochondrial particles obtained by sonication (162) 477
Valmikinathan, K., see Visvanatha Rao, V. N. (165) 288
Van Breemen, C. and Van Breemen, D.
Stimulation of ^{45}Ca efflux from smooth muscle by extracellular Ca^{2+}(163) 114
Van Breemen, D., see Van Breemen, C.(163) 114
Van Bruggen, E. F. J., Runner, C. M., Borst, P., Ruttenberg, G. J. C. M., Kroon, A. M. and Schuurmans Stekhoven, F. M. A. H.
Mitochondrial DNA. III. Electron microscopy of DNA released from mitochondria by osmotic shock (161) 402
Van Bruggen, E. F. J., see Ruttenberg, G. J. C. M. (157) 429
Van Dam, K. and Tsou, C. S.
Accumulation of substrates by mitochondria (162) 301
Van Deenen, L. L. M., see De Gier, J.(150) 666
Van Deenen, L. L. M., see De Haas, G. H.(159) 103
Van Deenen, L. L. M., see De Haas, G. H.(159) 118
Van Deenen, L. L. M., see Demel, R. A.(150) 1
Van Deenen, L. L. M., see Demel, R. A.(150) 655
Van Deenen, L. L. M., see Kinsky, S. C.(152) 174
Van Deenen, L. L. M., see Lesslauer, W.(150) 306
Van Deenen, L. L. M., see Van den Bosch, H. (152) 694
Van Deenen, L.L.M., see Van den Bosch, H. (164) 215
Van Deenen, L. L. M., see Van Golde, L. M. G. (152) 84
Van Deenen, L. L. M., see Zwaal, R. F. A.(150) 323
Van Deenen, L. L. M., see Zwaal, R. F. A.(163) 44
Van den Bergh, S. G., see Amons, R.(162) 452
Van den Bergh, S. G., see Groot, G. S. P.(153) 22
Van den Bergh, S. G., see Vallejos, R. H.(153) 509
Van den Bosch, H., Aarsman, A.J., Slotboom, A.J. and Van Deenen, L.L.M.
On the specificity of rat liver lysophospholipase (164) 215
Van den Bosch, H., Van Golde, L. M. G., Slotboom, A. J. and Van Deenen, L. L. M.
The acylation of isomeric monoacyl phosphatidylcholines (152) 694
Vandermeers, A. et Christophe, J.
α-Amylase et lipase du pancreas de rat. Purification chromatique, recherche du poids moléculaire et composition en acides aminés (154) 110
Vandermeers, A., Khayat, M. H., Rathé, J. et Christophe, J.
Vies moyennes de cinq hydrolases dans le pancréas du rat normal ou en malnutrition protidique (158) 448
Van Dorp, D.A., see Vonkeman, H.(164) 430
Van Duin, J., Pley, C. W., Bonnet-Smits, E. M. and Bosch, L.
Interaction between plant viral RNA and Escherichia coli ribosomes (155) 444
Van Eyk, H. G. and Leijnse, B.
The iron-transporting system in the body. I. Isolation and partial characterization of rabbit transferrin (160) 126
Van Golde, L. M. G., Pieterson, W. A. and Van Deenen, L. L. M.
Alterations in the molecular species of rat-liver lecithin by corn-oil feeding to essential fatty acid-deficient rats as a function of time (152) 84
Van Golde, L. M. G., see Van den Bosch, H. (152) 694
Van Kley, H., see Padayatty, J. D.(161) 51
Van Lancker, J. L., see Fausto, N.(161) 32
Van Marwijk, B. W., see Schmidt, D. G.(154) 613
Vänngard, T., see Malmström, B. G.(156) 67
Van Ravenswaay Claasen, J. C., see Hoogendam, B. W.(157) 579
Van Reisen, R., see Reinecke, C. J.(157) 566
Van Rossum, G. D. V.
Relation of the oxidoreduction level of electron carriers to ion transport in slices of avian salt gland (153) 124
Van Steveninck, J.
Competition of sugars for the hexose transport system in yeast (150) 424
Van Steveninck, J.
Transport and transport-associated phosphorylation of 2-deoxy-D-glucose in yeast (163) 386
Van Steveninck, J. and Dawson, E. C.
Active and passive galactose transport in yeast (150) 47
Van Tol, A., see Hulsmann, W. C.(162) 292
Van Tol, J., see Hoenders, H. J.(160) 283
Vanyushin, B. F., see Nikolskaya, I. I.(155) 626
Varandani, P. T. and Plumley, H.
Mechanism of action of glutathione-insulin transhydrogenase. Presence of a functional sulfhydryl group for activity (151) 273
Varetskaja, T. V., see Belitser, V. A.(154) 367
Vaskov, B., see Huisman, T. H. J.(160) 467
Vaskovsky, V. E., see Elyakova, L. A.(167) 462
Vasquez, J., see Wolf, P. L.(159) 212
Veazey, R. A., see Irving, C. C.(166) 246
Veeger, C., see Eisenkraft, B.(167) 227
Veeger, C., see Kalse, J. F.(159) 244
Veeger, C., see Koster, J. F.(151) 11
Veeger, C., see Koster, J. F.(153) 724
Veeger, C., see Koster, J. F.(167) 48
Veeger, C., see Visser, J.(159) 257
Veeger, C., see Visser, J.(159) 265

Veerabhadrappa, P.S., see Montgomery, M.W. (167) 567

Veerkamp, J. H., see Broekhuyse, R. M. (152) 316

Vegh, K., Spiegler, P., Chamberlain, C. and Mommaerts, W. F. H. M.
The molecular size of the calcium-transport ATPase of sarcotubular vesicles estimated from radiation inactivation (163) 266

Veis, A., see Clark, C. C. (154) 175

Veldhuisen, G., Poelman, M. C. and Cohen, J. A.
Genetic transformation of the bacteriophage T4. I. An outline and some properties of the phage transformation system (161) 94

Veldhuisen, G., Poelman, M. C. and Cohen, J. A.
Genetic transformation of the bacteriophage T4. II. Biological activity of DNA fragments (161) 109

Veldhuisen, G., Poelman, M. C. and Cohen, J. A.
Genetic transformation of the bacteriophage T4. III. Influence of ultraviolet irradiation and nitrous acid on the biological activity of isolated T4 DNA (161) 115

Veldsema-Currie, R. D. and Slater, E. C.
Inhibition by anions of dinitrophenol-induced ATPase of mitochondria (162) 310

Veldstra, H., see Bezemer-Sybrandy, S. M. (161) 568

Veldstra, H., see Kammeraat, C. (151) 1

Venetianer, P., Berberich, M. A. and Goldberger, R. F.
Studies on the size of the messenger RNA transcribed from the histidine operon during simultaneous and sequential derepression (166) 124

Venitt, S., Brookes, P. and Lawley, P. D.
Effects of alkylating agents on the induced synthesis of β-galactosidase by Eschericia coli B_{S-1} (155) 521

Venkatachalam, C.M.
Stereochemical studies on cyclic peptides. II. Molecular structure of cyclotriprolyl (168) 397

Venkatachalam, C.M.
Stereochemical criteria for polypeptides and proteins. VI. Non-bonded energy of polyglycine and poly-L-alanine in the crystalline β form (168) 411

Verghese, N., see Visvanatha Rao, V. N. (165) 288

Verhassel, J-P., see De Wachter, R. (157) 195

Verhoef, N.J., Kraal, B. and Bosch, L.
The binding of aminoacyl-tRNA to complexes of Escherichia coli ribosomes and plant viral RNA (155) 456

Verity, M. A. and Brown, W. J.
Activation and stability of lysosomal acid phosphohydrolase (151) 284

Verly, W. G., Deschamps, Y., Barbason, H. and Brakier, L.
DNA repair after ethyl methanesulfonate treatment of Escherichia coli (161) 548

Vernon, L. P., see Ke, B. (162) 467

Vesco, C. and Penman, S.
The fractionation of nuclei and the integrity of purified nucleoli in HeLa cells (169) 188

Veselá, H., see Čihák, A. (166) 277

Vesell, E. S., Fritz, P. J. and White, E. L.
Effects of buffer, pH, ionic strength and temperature on lactate dehydrogenase isozymes (159) 236

Vesterberg, O.
Studies on extracellular protein from Staphylococcus aureus. III. Investigations on the heterogeneity of hyaluronate lyase using the method of isoelectric focusing (168) 218

Vestling, C. S., see Mann, K. G. (159) 567

Vidra, J. D. and Loerch, J. D.
A study of pyrophosphorylase activities in maize endosperm (159) 551

Vierling, J., Roberts, J. L., Conway, G. and Heazlitt, R.
Effect on cardiac myosin of diverse methods of preparation (160) 53

Vilallonga, F.
Surface chemistry of L-α-dipalmitoyl lecithin at the air-water interface (163) 290

Vilkas, E., DeLaumeny, J. M. et Nacasch, C.
Sur la structure du polysaccharide des Cires D d'une souche humaine virulente de Mycobacterium tuberculosis (158) 147

Villar-Palasi, C. and Gazquez-Martinez, I.
Purification, properties and mechanism of interconversion of kidney phosphorylase (159) 479

Villee, C. A., see Cornell, N. W. (167) 172

Villegas, R. and Camejo, G.
Tetrodotoxin interaction with squid nerve membrane lipids (163) 421

Vincze, I. and Dénes, G.
Effect of temperature on the K_S for homoserine and the K_i for threonine of homoserine dehydrogenase from Chlamydomonas reinhardti (159) 423

Vinson, G. P., see Bell, J. B. G. (164) 412

Viñuela, E., Algranati, I. D., Feix, G., Garwes, D., Weissmann, C. and Ochoa, S.
Virus-specific proteins in Escherichia coli infected with some amber mutants of phage MS2 (155) 558

Visser, A., see Emmelot, P. (150) 364

Visser, J., McCormick, D. B. and Veeger, C.
Relations between conformations and activities of lipoamide dehydrogenase. II. Some aspects of recombination with FAD analogues (159) 257

Visser, J. and Veeger, C.
Relations between conformations and activities of lipoamide dehydrogenase. III. Protein association-dissociation and the influence on catalytic properties (159) 265

Visuri, K., see Gräsbeck, R. (158) 292

Visvanatha Rao, V. N., Valmikinathan, K. and Verghese, N.
Binding of aflatoxin by plasma albumin in vitro (165) 288

Viswanatha, T., see Oliver, R. W. A. (156) 422

Viswanatha, T., see Rickert, W. S. (170) 123

Vivian, S., see LaBella, F. S. (158) 286

Vodrážka, Z., see Čejka, J. (154) 589

Vodrážka, Z., see Hrkal, Z. (160) 269

Vogel, Jr., H. H., see Yatvin, M. B. (169) 536

Vogel, H. J., see Itikawa, H. (159) 547

Vogel, J. M., see Spolter, P. D. (167) 525

Volland, Chr., see Labbe, P. (159) 527

Volpin, D., Hörmann, H. and Kühn, K.
Isolation and localization of a peptide fragment from collagen treated with hydroxylamine (168) 389

Von Borcke, I. M., see Busch, E. W. (166) 547

Von der Decken, A.
Alterations in vitro of amino acid incorporating activity of liver preparations of non-starved normal and stress-induced rats (166) 487

Von der Muehll, E., see Wolf, P. L. (159) 212

Von Hippel, P. H., see Wingert, L. (157) 114

Von Jagow, R., Kiese, M. and Lenk, W.

Hydroxylation of acetic acid to glycolic acid in rabbits (158) 45
Vonkeman, H. and Van Dorp, D. A.
The action of prostaglandin synthetase on 2-arachidonyl-lecithin (164) 430
Voorma, H. O., see Hoogendam, B. W. (157) 579
Voorma, H. O., see Reinecke, C. J. (157) 566
Voorn, G., see Massini, P. (153) 589
Vornovitskaja, G. I., Shapot, V. S. and Nicolskaja, T. I.
Concerning the site of action of deoxyadenosine (deoxyadenosine triphosphate) upon the synthesis of nucleic acids in the cancer cell (166) 596

W

Wada, A. and Kishizaki, A.
Chromatographic studies with the immobilized polynucleotide in acrylamide gel matrix (166) 29
Wada, F., Shibata, H., Goto, M. and Sakamato, Y.
Participation of the microsomal electron transport system involving cytochrome P-450 in ω-oxidation of fatty acids (162) 518
Wada, H., see Asakawa, T. (170) 375
Wada, H., see Fujioka, M. (158) 70
Wada, H., see Nakano, Y. (159) 19
Wada, M., see Sugano, M. (152) 781
Wade, A., Yamamoto, Y., Fukutome, H. and Kawade, Y.
Ultraviolet inactivation of amino acid acceptance of transfer RNA (161) 469
Wadström, T.
Studies on extracellular proteins from Staphylococcus aureus. IV. Separation of α-toxin by isoelectric focusing (168) 228
Waehneldt, T. V. and Fox, S. W.
The binding of basic proteinoids with organismic or thermally synthesized polynucleotides (160) 239
Waehneldt, T. V., see Fox, S. W. (160) 246
Wählby, S.
Studies on Streptomyces griseus protease. I. Separation of DFP-reacting enzymes and purification of one of the enzymes (151) 394
Wählby, S.
The primary structure at the DFP-reacting site of a proteolytic enzyme from a strain of Arthrobacter (151) 409
Wählby, S. and Engström, L.
Studies on Streptomyces griseus protease. II. The amino acid sequence around the reactive serine residue of DFP-sensitive components with esterase activity (151) 402
Waley, S. G., see Burton, P. M. (151) 714
Walker, B. L., see Yurkowski, M. (158) 299
Walker, D. A., see Baldry, C. W. (153) 476
Walker, I.O., see Miall, S.H. (166) 711
Walker, J.B. and Walker, M.S.
Streptomycin biosynthesis: Enzymatic synthesis of scyllo-inosamine from scyllo-inosose and L-glutamine (170) 219
Walker, M.S., see Walker, J.B. (170) 219
Walker, N. J., Patton, S. and Dimick, P. S.
Incorporation of [1-^{14}C]acetate into the aliphatic δ-lactones of ruminant milk fat (152) 445
Walker, R.T., see Brammer, K.W. (166) 732
Wall, M. J., see Baker, R. D. (150) 649
Wallace, R. A., see Rudack, D. (155) 299
Wallach, D. F. H. and Zahler, P. H.
Infrared spectra of plasma membrane and endoplasmic reticulum of Ehrlich ascites carcinoma (150) 186
Wallén, P. and Iwanaga, S.
Differences between plasmic and tryptic digests of human S-sulfo-fibrinogen (154) 414
Wallén, P., see Iwanaga, S. (160) 280
Wallevik, K., see Ottesen, M. (160) 262
Walsh, J. A., Lisowska-Bernstein, B. and Lamm, M. E.
Homologies in the primary structure of immunoglobulin heavy chains from different animal species (168) 64
Walsh, R.L., see May, B.K. (169) 260
Walter, H. and Coyle, R. P.
Effect of membrane modification of human erythrocytes by enzyme treatment on their partition in aqueous dextran-polyethylene glycol two-phase systems (165) 540
Walter, H., Garza, R. and Coyle, R. P.
Partition of DEAE-dextran in aqueous dextran in aqueous dextran-polyethylene glycol phase and its effect on the partition of cells in such systems (156) 409
Walter, H., Krob, E. J. and Garza, R.
Factors in the partition of red blood cells in aqueous dextran-polyethylene glycol two-phase systems (165) 507
Wang, L., see Cohn, M. L. (159) 182
Wannemacher, Jr., R.W., see Cooper, W.K. (169) 269
Wardle, E., see Coulson, W. F. (167) 99
Warmsley, A. M. H., see Wimpenny, J. W. T. (156) 297
Warren, J. C. and Cheatum, S. G.
Stereospecificity of hydrogen transfer by bovine adrenal 3β-hydroxysteroid dehydrogenase (159) 540
Warren, R. A. J., see Peters, W. J. (165) 225
Warren, S.C. and Gould, G.W.
Bacillus cereus spore germination: Absolute requirements for an amino acid (170) 341
Warren, W. A.
Biosynthesis of phosphonic acids in Tetrahymena (156) 340
Wasserman, A. R. and Fleischer, S.
The stabilization of chloroplast function (153) 154
Wasserman, L. R., see Ross, J. (154) 70
Wasteson, Å. and Öbrink, B.
Demonstration of an interaction between collagen and chondroitin sulphate (170) 201
Watari, H., Isomoto, A., Oda, H. and Kuroda, M.
Detection of complex of D-amino-acid oxidase and D-alanine by rapid scan spectrophotometry (167) 184
Waters, M. D., Summer, G. K. and Hill, H. D.
Studies on the stability of 3-O-methyl fluorescein phosphate (159) 420
Watkins, J. C.
The surface properties of pure phospholipids in relation to those of lung extracts (152) 293
Watson, S., see Baker, R. D. (150) 649
Weaver, E. C.
Electron paramagnetic resonance signal produced by ferricyanide in photosynthetic plant materials (162) 286
Webb, E.C., see Runnegar, M.T.C. (167) 632
Webb, T. E., see Levitan, I. B. (155) 632
Webb, T.E., see Rizzo, A.J. (169) 163
Weber, W. W. and Cohen, S. N.
The mechanism of isoniazid acetylation by human N-acetyltransferase (151) 276
Webley, D. M., see Bacon, J. S. D. (158) 313

Wehrli, W., Nüesch, J., Knüsel, F. and Staehelin, M.
Action of rifamycins on RNA polymerase (157) 215
Weidenmüller, R., see Dowben, R. M. (158) 255
Weight, M. J., see Savage, N. (159) 401
Weil, J. H., see Louisot, P. (155) 38
Weinbach, E.C. and Garbus, J.
Structural changes in mitochondria induced by uncoupling reagents. The response to snake venom phospholipase A (162) 500
Weiner, H., see Bruce, R. M. (158) 499
Weinblum, D., Ottensmeyer, F.P. and Wright, G.F.
The structures of the isomeric thymine dimers as deduced from their dipole moments (155) 24
Weinreb, N. J., Brady, R. O. and Tappel, A. L.
The lysosomal localization of sphingolipid hydrolases (159) 141
Weinstein, A. N. and Segal, S.
The metabolic fate of $[1\text{-}^{14}\text{C}]$galactitol in mammalian tissue (156) 9
Weisberger, A. S., see Armentrout, S. A. (161) 180
Weiser, M., see Timpl, R. (168) 168
Weiss, J.J., see Rafi, A. (169) 230
Weissmann, C., see Viñuela, E. (155) 558
Weissmann, G., see Sessa, G. (150) 173
Weissová, K., see Kováč, L. (153) 55
Welkie, G. W.
Cobalt inhibition of iron-catalyzed hydrogen peroxide decomposition of riboflavin (158) 479
Weller, D.L., Heaney, A. and Sjogren, R.E.
A simple apparatus and procedure for electrofocusing experiments: pI of lactate dehydrogenase and isocitrate lyase (168) 576
Weller, D. L., Raina, A. and Johnstone, D. B.
Characterization of ribosomes of Tetrahymena pyriformis (157) 558
Wells, J. R. E.
Characterization of three proteolytic enzymes from French beans (167) 388
Wendell, P. L.
Distribution of glutathionine reductase and detection of glutathionine-cystine transhydrogenase in rat tissues (159) 179
Wenzel, M.
$[11\alpha\text{-}^{3}\text{H}]$Cortisol als Wasserstoffdonator bei der Reduktion von Androstendion und Oestron im Lebergewebe von Ratten (152) 431
Werenne, J., see Grosjean, H. (166) 616
Wessels, J. S. C.
Isolation and properties of two digitonin--soluble pigment-protein complexes from spinach (153) 497
Westphal, U., see Ganguly, M. (170) 309
Westphal, U., see Kerkay, J. (170) 324
Wheeldon, L. W., see Proudlock, J. W. (152) 434
Wheeler, C.M., see Rafi, A. (169) 230
Whichard, L., see Caffery, J. M. (157) 616
Whitby, L. G., see Smith, J. K. (151) 607
White, E. C., see Rama Sastry, B. V. (151) 597
White, E. L., see Vesell, E. S. (159) 236
White, Jr., H.B., see Bell, Jr., O.E. (164) 441
White, J. R., see Ishizu, K. (165) 283
Whitfeld, P. R. and Spencer, D.
Buoyant density of tobacco and spinach chloroplast DNA (157) 333
Whitney, J. G. and Grula, E. A.
A major attachment site for D-serine in the cell wall mucopeptide of Micrococcus lysodeikticus (158) 124
Whitson, G. L., Francis, A. A. and Carrier, W. L.
Ultraviolet-induced pyrimidine dimers in Tetrahymena. I. Removal in the dark (161) 285
Whittingham, C. P., see Thompson, C. M. (153) 260
Whittle, E. D., Bushnell, D. E. and Potter, V. R.
RNA associated with the outer membrane of rat liver nuclei (161) 41
Wieczorek, V., see Kluge, H. (167) 621
Wiegand, R. G., see Mao, J. C.-H. (157) 404
Wiener, S. L., Mass, M., Urivetzky, M. and Meilman, E.
A quantitative system for the study of collagen and hyaluronic acid synthesis in vitro (166) 229
Wiggins, P. M.
The effect of transient swelling upon the composition of kidney tissue (158) 281
Wilcox, H. G. and Heimberg, M.
The isolation of human serum lipoproteins by zonal ultracentrifugation (152) 424
Wiley, Jr., A.L., see Yatvin, M.B. (169) 536
Wilhelm, J. M., Oleinick, N. L. and Corcoran, J. W.
The inhibition of bacterial RNA synthesis by the rifamycin antibiotics (166) 268
Wilhelm, J. M., see Oleinick, N. L. (155) 290
Wilkie, D., see Negrotti, T. (153) 341
Wilkie, D., see Maroudas, N.G. (166) 681
Wilkinson, S. G.
Glycolipids containing glucose and uronic acids in Pseudomonas species (152) 227
Wilkinson, S.G.
Glycosyl diglycerides from Pseudomonas rubescens (164) 148
Willard, J. M. and Gibbs, M.
Purification and characterization of the fructose diphosphate aldolases from Anacystis nidulans and Saprospira thermalis (151) 438
Willetts, A.J., see Cox, N. (170) 438
Williams, E. J. and Bradley, J.
Voltage-clamp and current-clamp studies on the action potential in Nitella translucens (150) 626
Williams, E. J., see Hogg, J. (150) 518
Williams, E. J., see Hogg, J. (150) 640
Williams, G. R. and Novelli, G. D.
Ribosome changes following illumination of dark-grown plants (155) 183
Williams, H. E. and Lundholm, U. I.
UDPG-glycogen synthetase activity in human leucocytes (158) 465
Williams, Jr., J. N.
A comparative study of cytochrome ratios in mitochondria from organs of the rat, chicken and guinea pig (162) 175
Williams, Jr., J. N. and Jacobs, R. M.
Reversible reaction of ε-amino groups of cytochrome c with salicylaldehyde to produce cytochrome c polymers (154) 323
Williams, J.P., see Kung, S.D. (169) 265
Williams, R. M., see Ladbrooke, B. D. (150) 333
Williams, R.W., see Jacobson, A.B. (169) 7
Williams, W. P.
A comparison of the separate package and spill-over models of photosynthesis for the alga Chlorella pyrenoidosa (153) 484
Williamson, D. H., see Bojanowska, K. (159) 560
Willis, J.S.
Ouabain inhibition of ion transport and respiration in renal cortical slices of ground squirrels and hamsters (163) 506
Willis, J.S.

The interaction of K^+, ouabain and Na^+ on the cation transport and respiration of renal cortical cells of hamsters and ground squirrels (163) 516
Wilson, I.F., Baldwin, B.C. (162) 614
Wilson, J. B., see Huisman, T. H. J. (160) 467
Wilson, J. B., see Kleihauer, E. F. (154) 220
Wilson, J.T., see Stiles, J.W. (162) 631
Wimpenny, J. W. T. and Warmsley, A. M. H.
The effect of nitrate on Krebs cycle enzymes in various bacteria (156) 297
Wimpenny, J. W. T., see Cole, J. A. (162) 39
Winand, J., Furnelle, J. et Christophe, J.
Le métabolisme lipidique du foie chez la souris normale et la souris obèse-hyperglycémique (152) 280
Wingert, L. and Von Hippel, P. H.
The conformation dependent hydrolysis of DNA by micrococcal nuclease (157) 114
Winocur, B. A., Macey, R. I. and Tolberg, A. B.
Electrolyte exchange in isolated spinach chloroplasts (150) 32
Winterbourn, C. C. and Batt, R. D.
Incorporation of [1-^{14}C]palmitate into the lipids of bovine blood cells (152) 255
Winterbourn, C. C. and Batt, R. D.
Metabolism in vivo of bovine erythrocyte lipids (152) 412
Wiqvist, N., see Pasqualini, J. R. (152) 648
Wirth, Jr., F. P., see Wood, R. E. (163) 171
Wistrand, P. J. and Rao, S. N.
Immunologic and kinetic properties of carbonic anhydrases from various tissues (154) 130
Witt, I., Neufang, B. and Müller, H.
The effect of proflavin on yeast cells (170) 216
Wittels, B. and Blum, J. J.
Carnitine and carnitine palmityltransferase in Euglena growing with palmitate as a sole carbon source (152) 220
Wohltmann, H. J. and Narahara, H. T.
Studies related to the concept that a thiol disulfide interchange is involved in the action of insulin on muscle cells (150) 500
Wolf, P. L., Horwitz, J. P., Freisler, J. V., Vasquez, J. and Von der Muehll, E.
The intracellular localization of exonuclear and endonuclear "phosphodiesterase" activity by histochemical methods (159) 212
Wolfe, L. S., see Pace-Asciak, C. (152) 784
Wolff, I., see Timpl, R. (168) 168
Wolff, J. A., see Marchok, A. C. (155) 378
Wood, E. J. and Bannister, W. H.
The effect of photooxidation and histidine reagents on Murex trunculus haemocyanin (154) 10
Wood, E.J., see Bannister, W.H. (168) 392
Wood, R. E., Wirth, Jr., F. P. and Morgan, H. E.
Glucose permeability of lipid bilayer membranes (163) 171
Woodin, T. S. and Segel, I. H.
Isolation and characterization of glutathione reductase from Penicillium chrysogenum (167) 64
Woodin, T. S. and Segel, I. H.
Glutathione reductase-dependent metabolism of cysteine-S-sulfate by Penicillium chrysogenum (167) 78
Woodrow, I. L. and DeMan, J. M.
Distribution of trans-unsaturated fatty acids in milk fat (152) 472
Woolum, J. C., Tiezzi, E. and Commoner, B.
Electron spin resonance of iron-nitric oxide complexes with amino acids, peptides and proteins (160) 311
Wootton, I.D.P., see Aw, S.E. (168) 362
Worowski, K., see Lukasiewicz, H. (159) 503
Wright, C.-S., see Kleihauer, E. F. (154) 220
Wright, E. M. and Diamond, J. M.
Effects of pH and polyvalent cations on the selective permeability of gall-bladder epithelium to monovalent ions (163) 57
Wright, G. F., see Weinblum, D. (155) 24
Wulff, V. J., see Samis, Jr., H. V. (166) 410
Wyman, J., see Brunori, M. (154) 315
Wyngaarden, J., see Rouvière, J. (166) 94
Wynn, C. H., see Bowden, J. K. (154) 190

Y

Yagi, K., Okamura, K., Sugiura, N. and Kotaki, A.
  Mechanism of enzyme action. IV. Isolation by crystallization of the fully reduced form of D-amino acid oxidase (159) 1
Yagi, K., Sugiura, N., Okamura, K. and Kotaki, A.
  Mechanism of enzyme action. III. Crystallization of the semiquinoid form of D-amino-acid oxidase (151) 343
Yagi, K., see Kotaki, A. (151) 689
Yagi, T., Honya, M. and Tamiya, N.
  Purification and properties of hydrogenases of different origins (153) 699
Yamada, J., see Arakawa, K. (168) 106
Yamada, Y. and Nozu, K.
  Base complementarity between rapidly labeled RNA in Escherichia coli B infected with ultraviolet-irradiated T2 phages and T2-DNA (169) 67
Yamagishi, H.
  Release of DNA from phage on the top of sucrose gradients (166) 738
Yamagishi, H. and Takahashi, I.
  Genetic transcription in asporogenous mutants of Bacillus subtilis (155) 150
Yamaguchi, M., see Price, C. C. (166) 327
Yamamoto, H. Y., see Takeguchi, C. A. (153) 459
Yamamoto, I., see Sugano, M. (152) 781
Yamamoto, I., see Yoshida, H. (158) 489
Yamamoto, Y., see Wade, A. (161) 469
Yamamura, Y., see Hayashi, A. (168) 262
Yamanaka, K.
  Purification, crystallization and properties of the D-xylose isomerase from Lactobacillus brevis (151) 670
Yamanaka, K., see Sakai, S. (151) 684
Yamano, T., see Asakawa, T. (170) 375
Yamano, T., see Ichikawa, T. (153) 753
Yamaoka, K.
  Cotton effects of native and denatured DNA-acridine orange complexes (169) 553
Yamashina, I., see Ohgushi, T. (156) 417
Yamashita, J. and Kamen, M. D.
  Inhibition of partial reactions in bacterial photosynthesis by 3-(3,4-dichlorophenyl)-1,1-dimethylurea (153) 848
Yamashita, J. and Kamen, M. D.
  Observation on the nature of pulse-labeled RNA's from photosynthetically or heterotrophically grown Rhodospirillum rubrum (161) 162
Yamashita, K., Itoh, M. and Shibata, K.
  Light-absorption and light-scattering changes during shrinking and swelling of chloroplasts (162) 610
Yamauchi, A., Matsubara, A., Kimizuka, H. and Abood, L. G.
  Differential effect of sodium and potassium on calcium adsorption to stearic acid monolayers (150) 181
Yamazaki, H., see Mizuno, S. (157) 322
Yang, C.C., Chang, C.C., Hayashi, K., Suzuki, T., Ikeda, K. and Hamaguchi, H.
  Optical rotatory dispersion and circular dichroism of cobrotoxin (168) 373
Yao, K., see Ubuka, T. (158) 493
Yao, Y.-M. S., see Rose, D. P. (163) 93
Yariv, J., Kalb, A. J. and Levitzki, A.
  The interaction of concanavalin A with methyl α-D-glucopyranoside (165) 303
Yasuda, Y., see Fukuda, M. (159) 215
Yatvin, M. B., Mitchen, J. L., Wiley, Jr., A. L. and Vogel, Jr., H. H.
  Polyribosome reduction and recovery following neutron exposure of regenerating liver (169) 536
Yielding, K.L., see Blodgett, L.W. (169) 451
Yodaiken, R.E., see Malviya, A.N. (162) 195
Yokoshima, T., see Sugimura, T. (170) 427
Yokoyama, E. H., see Nichols, A. V. (168) 87
Yon, J., see Béchet, J. J. (151) 165
Yon, J., see Clément-Metral, J. (160) 340
Yonetani, T., see Iizuka, T. (167) 257
Yoneyama, Y., see Sugita, Y. (160) 291
Yoshida, F., see Motai, H. (154) 586
Yoshida, H., Duval, J. et Ebel, J-P.
  Halogénation des acides nucléiques. VI. Ioduration des nucléosides en milieu diméthylformamide (161) 13
Yoshida, H., Miki, N., Ishida, H. and Yamamoto, I.
  Release of amylase from zymogen granules by ATP and a low concentration of Ca^{2+} (158) 489
Yoshida, H., Nagai, K., Kamei, M. and Nakagawa, Y.
  Irreversible inactivation of (Na$^+$-K$^+$)-dependent ATPase and K$^+$-dependent phosphatase by fluoride (150) 162
Yoshida, H., see Matsuda, T. (150) 739
Yoshida, M., Furuichi, Y., Kaziro, Y. and Ukita, T.
  The modification of nucleosides and nucleotides. IX. Inactivation of coding response of yeast tRNA containing inosine residue by cyanoethylation (166) 636
Yoshida, M., Kaziro, Y. and Ukita, T.
  The modification of nucleosides and nucleotides. X. Evidence for the important role of inosine residue in codon recognition of yeast alanine tRNA (166) 646
Yoshida, M. and Ukita, T.
  Modification of nucleosides and nucleotides. VII. Selective cyanoethylation of inosine and pseudouridine in yeast transfer RNA (157) 455
Yoshida, M. and Ukita, T.
  Modification of nucleosides and nucleotides. VIII. The reaction rates of pseudouridine residues with acrylonitrile and its relation to the secondary structure of transfer RNA (157) 466
Yoshikami, D., Katz, G. Keller, E.B. and Dudock, B.S.
  A fluorescence assay for phenylalanine transfer RNA (166) 714
Yoshimoto, A. and Sato, R.
  Studies on yeast sulfite reductase. I. Purification and characterization (153) 555
Yoshimoto, A. and Sato, R.
  Studies on yeast sulfite reductase. II. Partial purification and properties of genetically in complete sulfite reductases (153) 576
Yoshino, M., Ogasawara, N., Suzuki, N. and Kotake, Y.
  Dissociation and association of AMP nucleosidase from Azotobacter vinelandii

(167) 216

Younathan, E. S. and Rudel, L. L.
Reaction of alloxan with thiol groups of proteins. Blockage of the reactivation of reduced ribonuclease (168) 11

Young, D., see Heumann, W. (156) 429

Young, I. G., Batoerham, T. and Gibson, F.
Isochorismic acids: A new intermediate in the biosynthesis of 2,3-dihydroxybenzoic acid (165) 567

Young, S. W. and Irvin, J. L.
Effects of histones on induction of hepatic threonine dehydratase (157) 643

Young, T. W. and Sykes, J.
Studies on the ribosomes and ribonucleic acids of Aerobacter aerogenes grown at different rates in magnesium-limited continuous culture (169) 117

Young, T. W., see Sykes, J. (169) 103

Yuan, D., see Bremer, H. (169) 21

Yura, T., Imai, M., Okamoto, T. and Hiraga, S.
Transcription of the tryptophan operon of Escherichia coli in vitro. I. Detection and quantitative determination of specific RNA (169) 494

Yurkowski, M. and Walker, B. L.
The carbohydrate moiety of rat mucosal cerebrosides (158) 299

Yurowitzki, Yu. G. and Milman, L. S.
The effect of some metabolites on glucose-6-phosphate dehydrogenase activity in loach embryos (151) 270

Z

Zahavi, M., Tahori, A. S. and Mager, J.
  Studies on the biochemical basis of susceptibility and resistance of the housefly to fluoroacetate (153) 787
Zahler, P. H., see Wallach, D. F. H. (150) 186
Zahler, W. L., Barden, R. E. and Cleland, W. W.
  Some physical properties of palmityl-CoA micelles (164) 1
Zahn, H., see Shimonishi, Y. (154) 598
Zakim, D. and Herman, R. H.
  The effect of intravenous fractose and glucose on the hepatic α-glycerophosphate concentration in the rat (165) 374
Zakim, D., see Rosensweig, N.S. (170) 228
Zakim, D., see Stifel, F.B. (170) 221
Zalik, S., see Mehta, S.L. (169) 381
Zamecnik, P. C., see Schofield, P. (155) 410
Zappia, V., see Salvatore, F. (158) 461
Zatti, M., see Rossi, F. (153) 296
Zbarsky, I.B., see Gause, Jr., G.G. (166) 752
Zerner, B., see North, W. G. (160) 286
Zerner, B., see Runnegar, M.T.C. (167) 632
Zhenodarova, S.M. and Habarova, M.I.
  The enzymic synthesis of adenylyl-(3'-5')-cytidine (169) 559
Zieve, L., see Doizaki, W. M. (152) 713
Zigman, S. and Lerman, S.
  The relationship between soluble and insoluble protein in the lens (154) 423
Zimmer, Ch.
  Alkaline denaturation of DNA's from various sources (161) 584
Zimmer, Ch., see Luck, G. (169) 466
Zimmer, Ch., see Luck, G. (169) 548
Zimmerman, E. F.
  Azaguanine inhibition of protein synthesis. III. Site of action in HeLa cells (157) 378
Zinkham, W. H., Holtzman, N. A. and Isensee, H.
  The molecular size of lactate dehydrogenase isozymes in mature testes (160) 172
Zito, R., see Brunori, M. (154) 315
Zucchelli, G., see Ronca, G. (159) 203
Zuidweg, M. H. J.
  Hydroxylation of Reichstein's compound S with cell-free preparations from Curvularia lunata (152) 144
Zwaal, R. F. A. and Van Deenen, L. L. M.
  The solubilization of human erythrocyte membranes by n-pentanol (150) 323
Zwaal, R. F. A. and Van Deenen, L. L. M.
  Protein patterns of red cell membranes from different mammalian species (163) 44
Zyk, N. and Citri, N.
  Anomalous dissociation constants for penicillinase and competing substrates (151) 306
Zyk, N. and Citri, N.
  The interaction of penicillinase with penicillins. VI. Comparison of free and antibody-bound enzyme (159) 317
Zyk, N. and Citri, N.
  The interaction of penicillinase with penicillins. VII. Effect of specific antibodies on conformative response (159) 327

SUBJECT INDEX

VOLUMES 150-170

1968

A

Abscisin II
  Acceleration of senescence and of the increase of chromatin-associated nucleases in excised barley leaves by --- and its reversal by kinetin (Srivastava)(169) 534
Acceptor activity
  Inhibition of --- of tRNA by specific antibodies against tRNA (Pulkrábek, Raška Jr., Rychlík)(157) 652
Acceptor activity
  RNA with amino acid- --- isolated from an oncogenic virus (Trávníček)(166) 757
Acetabularia
  Kinetics of RNA synthesis in --- (Dillard, Schweiger)(169) 561
[2-^{14}C]Acetate
  Biosynthesis of secretory lipids from --- by bovine mammary cells in vitro (Kinsella, McCarthy)(164) 518
Acetate
  Incorporation of [1 - ^{14}C]--- into the aliphatic δ-lactones of ruminant milk fat (Walker, Patton, Dimick)(152) 445
Acetate metabolism
  The effects of denervation on the --- by isolated rat diaphragm muscle (Kouvelas, Manchester)(164) 132
Acetate metabolism
  Effects of glucagon and fasting on --- in perfused rat liver (Regen, Terrell)(170) 95
Acetic acid
  Hydroxylation of --- to glycolic acid in rabbits (Jagow, Kiese, Lenk)(158) 45
Acetic anhydride
  Action of --- upon yeast RNA's in dimethylformamide (Keith, Ebel)(166) 16
Acetic anhydride
  Desensitization of kidney fructose-1,6-diphosphatase by --- (Marcus)(151) 312
Acetoacetylation of amino groups
  Reversible --- in proteins (Marzotto et al.) (154) 450
Acetobacter suboxydans
  Isolation of 5,6-dimethylbenzimidazolyl cobamide coenzyme as a cofactor for glutamate formation from --- (Kato, Hayashi, Kamikubo)(165) 233
N-Acetyl-β-alanine deacetylase
  --- in hog kidney (Fujimoto, Koyama, Tamiya)(167) 407
2-Acetylaminofluorene
  Difference in binding of --- to rat liver DNA and ribosomal RNA in vivo (Kriek)(161) 273
Acetylaminofluorene
  Differential responses of DNA and RNA polymerase to modifications of the template rat liver DNA caused by action of the carcinogen --- in vivo and in vitro (Troll et al.)(157) 16
N-Acetylanthranilic acid
  Isolation and identification of --- from quinic acid metabolism by Aerobacter aerogenes (Ratledge)(156) 215
N-Acetyl-L-aspartic acid
  Acetyl transport mechanisms: Metabolism of --- in the non-nervous tissues of the rat (Benuck, D'Adamo Jr.)(152) 611
Acetylcholine
  Colorimetric assay of --- by gallocyanine (Steinhart)(158) 171
Acetylcholines
  Molecular aspects of the interactions of halgeno- --- with cholinesterase (Rama Sastry, Chiou)(167) 339
Acetylcholine
  Stimulatory effect of Na$^+$ and ATP on the release of --- from synaptic vesicles (Matsuda, Hata, Yoshida)(150) 739
Acetylcholinesterase
  Molecular aspects of the interaction of lactoylcholine and glyceroylcholine with --- (Rama Sastry, White)(151) 597
Acetylcholinesterase
  Properties of matrix-supported --- (Pennington et al.)(167) 479
Acetyl-CoA
  Interrelationships between liver composition, plasma glucose and ketones, and hepatic --- and citric acid during prolonged starvation in the male rat (Herrera, Freinkel)(170) 244
Acetyl-CoA
  Mechanism of malonyl-CoA-independent fatty acid synthesis. I. The mechanism of elongation of long-chain fatty acids by --- (Seubert et al.)(164) 498
Acetyl-CoA carboxylase
  The activation of rat liver --- by incubation (Swanson, Curry, Anker)(159) 390
Acetyl-CoA carboxylase
  Fatty acid biosynthesis. IV. Properties of --- in lactating-rabbit mammary gland (Easter, Dils)(152) 653
N-Acetyl-β-glucosaminidase
  Changes in --- activity in hepatic damage (Koizumi et al.)(151) 628
N-Acetylglutamic γ-semialdehyde
  Enzymic basis for a genetic suppression: Accumulation and deacylation of --- in enterobacterial mutants (Itikawa, Baumberg, Vogel)(159) 547
N-Acetyl-β-D-hexosaminidase
  Studies on glycoproteins. XVII. Purification of O-seryl-N-acetylgalactosaminide glycohydrolase. Its complete separation from --- and proteinases (Schauer, Gottschalk) (156) 304
N-[^{3}H] Acetylneuraminic acid
  Incorporation of D-[^{14}C]galactose and --- into glycoprotein by particles from bovine retina (O'Brien, Muellenberg)(158) 189
Acetyl phosphate
  Control of pyruvate phosphoroclastic activity in extracts of Clostridium pasteurianum by ADP and --- (Biggins, Dilworth) (156) 285
N-Acetyltransferase
  The mechanism of isoniazid acetylation by human --- (Weber, Cohen)(151) 276
Acetyl transport
  --- mechanisms: Metabolism of N-acetyl-L-aspartic acid in the non-nervous tissues of the rat (Benuck, D'Adamo Jr.)(152) 611
Acetyltrypsin
  Influence of ionic strength on the activity of trypsin and --- (Béchet et al.)(151) 165

Achlorophyllous mutant
An action spectrum from nucleic acid formation in an --- of Chlorella pyrenoidosa (Senger, Bishop)(157) 417

Achromobacter georgiopolitanum
Occurrence of UDP-N-acetylhexosaminuronic acid in a mutant strain of --- n sp. (Smith)(158) 470

α_1-Acid glycoprotein
Isolation and chemical composition of the human plasma --- variants (Schmid, Okuyama, Kaufmann)(154) 565

α_1-Acid glycoprotein
Patterns of polymorphism of --- in different species (Binetti)(154) 234

α_1-Acid glycoprotein
Steroid–protein interactions. XIX. Complex formation between --- and steroid hormones (Kerkay, Westphal)(170) 324

α_1-Acid glycoprotein
Steroid–protein interactions. XX. Effects of chemical modifications on progesterone-binding affinity of --- (Ganguly, Westphal) (170) 309

Acidic proteins
DNA-associated --- (Holoubek, Crocker) (157) 352

Acid phosphatase
Activation and stability of --- from lysosomes (Verity, Brown)(151) 284

Acid phosphatase
The heterogeneity of prostatic --- (Smith, Whitby)(151) 607

Acid phosphatase
Properties of an --- in Escherichia coli (Hafkenscheid)(167) 582

Aciduria
β-Aminoisobutyrate-α-ketoglutarate transaminase in relation to β-aminoisobutyric --- (Kakimoto et al.)(156) 374

Aconitate hydratase
Catabolite repression of --- in Bacillus subtilis (Cox, Hanson)(158) 36

Aconitate hydratase
Iron in relation to --- activity in Glycine max. Merr. (Hsu, Miller)(151) 711

Acridine orange
An NMR study of the interaction of purine and pyrimidine derivatives with --- (Hruska, Danyluk)(161) 250

Acrylonitrile
Modification of nucleosides and nucleotides. VIII. The reaction rates of pseudouridine residues with --- and its relation to the secondary structure of transfer RNA (Yoshida, Ukita)(157) 466

ACTH
Interaction of N-ethylmaleimide and --- on isolated fat cells (George, Palmer, McCoy) (170) 213

Actidione
Influence of cycloheximide (---) upon pyrimidine nucleotide metabolism and RNA synthesis in cocklebur leaf discs (Ross) (166) 40

Actin
--- and bound nucleotide stoichiometry (Tsuboi)(160) 420

Actin
Studies on the properties of chemically modified ---. I. Photooxidation, succinylation, nitration (Mühlrad, Corsi, Granata) (162) 435

Actin
Studies on the properties of chemically modified ---. II. Trinitrophenylation (Mühlrad)(162) 444

F-Actin
Effect of dinitrophenylation on the properties of G-actin and --- (Gerber, Ooi)(154) 162

G-Actin
Effect of dinitrophenylation on the properties of --- and F-actin (Gerber, Ooi)(154) 162

F-Actin
Interaction of troponin with --- and its abolition by tropomyosin (Drabikowski, Nonomura)(160) 129

Actin-bound calcium
The exchangeability of --- with various divalent cations (Kasai, Oosawa)(154) 520

G-Actin-bound calcium
Studies on the exchange of --- with bivalent cations (Strzelecka-Golaszewska, Drabikowski)(162) 581

α-Actinin
The modification of actomyosin by ---. IV. The role of sulfhydryl groups (Seraydarian, Briskey, Mommaerts)(162) 424

Actinomycin
The binding of --- D and F to bacterial DNA (Cavalieri, Nemchin)(166) 722

Actinomycin D
Degradation of thymus DNA and crab poly d(A-T) by micrococcal nuclease in the presence of --- (Sulkowski, Laskowski Sr.) (157) 207

Actinomycin D
--- inhibition of thyroxine-induced synthesis of carbamyl phosphate synthetase (Kim, Cohen)(166) 574

Actinomycin D
Interaction of --- with the chymotrypsinogen-DNA complex (Bobb)(169) 457

Actinomycin D
Mechanism of the paradoxical stimulation of ribonuclease synthesis in Bacillus subtilis by --- (May et al.)(169) 260

Actinomycin D-DNA complex
Effect of cupric ions on the --- (Fishman, Rosenwasser)(166) 584

Action potential
Voltage-clamp and current-clamp studies on the --- in Nitella translucens (Williams, Bradley)(150) 626

Activated ATPase
Elicitation of the brain microsomal magnesium-calcium- --- by digitonin treatment (Nakamura, Konishi)(159) 206

Activated ATPase
Thallium activation of the sodium-potassium- --- of rabbit kidney (Britten, Blank) (159) 160

Active transport
Measurement of the membrane potential and evidence for --- of ions in Chlorella pyrenoidosa (Barber)(150) 618

Active transport
--- and passive galactose transport in yeast (Van Steveninck, Dawson)(150) 47

Actomyosin
Effects of alkali metal on the magnesium-activated ATPase activity of reconstituted --- (Katz)(162) 79

Actomyosin
The modification of --- by α-actinin. IV. The role of sulphydryl groups (Seraydarian, Briskey, Mommaerts)(162) 424

Actomyosin
Reactivity of --- and myosin with 1-fluoro-2,4-dinitrobenzene in vivo and in vitro

(Bárány, Bárány, Bailin)(168) 298

- Acylation reactions
  - --- with cyclic imides (Smyth, Tuppy) (168) 173
- Acyl-coenzyme A
  - Formation of S-acyl pantetheine from --- by plasma membranes (Stahl, Trams) (163) 472
- Acyl-coenzyme A
  - Synthesis of lipids by liver plasma membranes. Incorporation of --- derivatives into membrane lipids in vitro (Trams, Stahl, Robinson)(163) 459
- Acyl[^{14}C]phenylalanyl-tRNA
  - Modified aminoacyl-tRNA. IV. The behaviour of --- in a ribosomal system from wheat germ (De Groot et al.)(161) 137
- Adenine
  - Chemical analysis of DNA alterations. III. Isolation and characterization of --- oxidation products obtained from oligo-and mononodeoxyadenylic acids treated with hydroxyl radicals (Rhaese)(166) 311
- Adenine nucleotide
  - --- metabolism of blood platelets. III. Adenine phosphoribosyl transferase and nucleotide formation from exogenous adenine (Holmsen, Rozenberg)(157) 266
- Adenine nucleotide
  - --- metabolism of blood platelets. IV. Platelet aggregation response to exogenous ATP and ADP (Rozenberg, Holmsen) (157) 280
- Adenine nucleotide
  - Regulation of AMP deaminase by 2,3-diphosphoglyceric acid: A possible mechanism for the control of --- metabolism in human erythrocytes (Askari, Rao)(151) 198
- Adenine nucleotide metabolism
  - --- of blood platelets. I. Adenosine kinase and nucleotide formation from exogenous adenosine and AMP (Holmsen, Rozenberg) (155) 326
- Adenine nucleotide metabolism
  - --- of blood platelets. II. Uptake of adenosine and inhibition of ADP-induced platelet aggregation (Rozenberg, Holmsen) (155) 342
- Adenine phosphoribosyl transferase
  - Adenine nucleotide metabolism of blood platelets. III. --- and nucleotide formation from exogenous adenine (Holmsen, Rozenberg)(157) 266
- Adenosine
  - Adenine nucleotide metabolism of blood platelets. I. Adenosine kinase and nucleotide formation from exogenous --- and AMP (Holmsen, Rozenberg)(155) 326
- Adenosine
  - Adenine nucleotide metabolism of blood platelets. II. Uptake of --- and inhibition of ADP-induced platelet aggregation (Rozenberg, Holmsen)(155) 342
- Adenosine deaminases
  - Two different hepatic --- in the chicken (Ma, Fisher)(159) 153
- Adenosine deaminase
  - Competitive inhibition of --- by purine and pyrimidine bases (Ronca, Zucchelli) (159) 203
- Adenosine 5'-diphosphate, see ADP
- Adenosine kinase
  - Adenine nucleotide metabolism of blood platelets. I. --- and nucleotide formation from exogenous adenosine and AMP (Holmsen, Rozenberg)(155) 326
- Adenosine 3', 5'-monophosphate, see 3', 5'-cyclic AMP
- Adenosine 5'-phosphate, see AMP
- Adenosine-silver binding
  - Metal-ATP binding. I. Thermodynamic data for --- (Phillips, George)(162) 73
- Adenosine 5'-triphosphate, see ATP
- Adenosine 5'-triphosphate phosphohydrolase, see ATPase
- S-Adenosylhomocysteine
  - Quantitative analysis of --- in liver (Salvatore, Zappia, Shapiro)(158) 461
- Adenylate kinase
  - Study of adenosine 5'-mono-, di- and triphosphates in plant tissues. IV. Regulation of nucleotide level, in vivo, by ---: Theoretical and experimental study (Bomsel, Pradet)(162) 230
- Adenyl cyclase
  - The effect of parathyroid hormone on --- in rat kidney (Douša, Rychlík)(158) 484
- Adenylyl-(3'-5')-cytidine
  - Enzymic synthesis of --- (Zhenodarova, Habarova)(169) 559
- Adipose tissue
  - Association of epididymal --- hexokinase with subcellular structure (Spydevold, Borrebaek)(167) 291
- Adipose tissue
  - Growth hormone effects on histidine incorporation into protein by --- from hypophysectomized rats (Swislocki)(169) 556
- Adipose tissue mitochondria
  - Oxidative phosphorylation in brown --- (Guillory, Racker)(153) 490
- ADP
  - Adenine nucleotide metabolism of blood platelets. IV. Platelet aggregation response to exogenous ATP and --- (Rozenberg, Holmsen)(157) 280
- ADP
  - Control of pyruvate phosphoroclastic activity in extracts of Clostridium pasteurianum by --- and acetyl phosphate (Biggins, Dilworth)(156) 285
- ADP-ATP exchange
  - Light-triggered, thiol-dependent --- activity in spinach chloroplasts (Stewart, Rienits) (153) 907
- ADP-ATP exchange enzyme
  - The role of the --- in oxidative phosphorylation (Groot, Van den Bergh)(153) 22
- Adrenalectomy
  - Regulation of the ($Na^+ + K^+$)-activated ATP hydrolyzing enzyme system in rat kidney. I. The effect of --- and the supply of sodium on the enzyme system (Jörgensen)(151) 212
- Adrenal enzymes
  - Location of hydroxy groups introduced to steroid molecules by --- and testicular enzymes (Nakano et al.)(152) 186
- Adrenocorticotropic hormone, see ACTH
- Adsorption of nucleic acids
  - --- at the alumina-water interface (Upadhyay, Chattoraj)(161) 561
- Aerobacter aerogenes
  - Isolation and identification of N-acetylanthranilic acid from quinic acid metabolism by --- (Ratledge)(156) 215
- Aerobacter aerogenes
  - Studies on the ribosomes and RNA's of --- grown at different rates in carbon-limited continuous culture (Sykes, Young)(169) 103
- Aerobacter aerogenes

Studies on the ribosomes and RNA's of --- grown at different rates in magnesium-limited continuous culture (Young, Sykes) (169) 117

Aflatoxin
Binding of --- by plasma albumin in vitro (Visvanatha, Valmikinathan, Verghese) (165) 288

Aflatoxin B_1
Effects of --- on polysomal profiles and RNA synthesis in rat liver (Roy) (169) 206

Agarose
Gel filtration of deoxyribonucleoprotein on --- (Loeb) (157) 424

Agarose
Physical characteristics of the --- molecule (Hickson, Polson) (165) 43

D-Alanine
Detection of complex of D-amino-acid oxidase and --- by rapid scan spectrophotometry (Watari et al.) (167) 184

Alanine transfer RNA
Modification of nucleosides and nucleotides. X. Evidence for the important role of inosine residue in codon recognition of yeast --- (Yoshida, Kaziro, Ukita) (166) 646

Albumin
Bovine serum --- exposed to high pressure (Aoki et al.) (160) 368

Albumin
Binding of aromatic sulphonic acids to bovine serum --- (Flanagan, Ainsworth) (168) 16

Albumin
Hydrophobic interaction of polycyclic aromatic hydrocarbons with human serum --- (Franke) (160) 378

Albumin
Partial molar volume and conformational changes produced by the denaturation of --- by guanidine hydrochloride (Katz) (154) 468

Albumin
Specificity effects of cation binding to the macroion in the bovine serum --- -histamine interaction (Botré, Marchetti, Borghi) (154) 360

Alcohol dehydrogenase
Inhibition of yeast --- by 2-bromo-2-phenylacetaldehyde (Tipton) (151) 692

Alcohol dehydrogenases
Presence and regulation of the synthesis of two --- from Saccharomyces cerevisiae (Schimpfessel) (151) 317

Alcohol oxidase
---, a flavoprotein from several Basidiomycetes species. Crystallization by fractional precipitation with polyethylene glycol (Janssen, Ruelius) (151) 330

Aldose reductase inhibitor
Effect of an --- on the galactose-exposed rabbit lens (Kinoshita et al.) (158) 472

Aldosterone
Effect of --- on glucose metabolism in toad bladder (Kirchberger et al.) (165) 22

Aldosterone
--- -induced RNA synthesis in the adrenalectomized rat kidney (Forte, Landon) (157) 303

Aldosterone
Role of nucleic acids in the sodium-retaining action of --- (De Weer, Crabbé) (155) 280

Aldosterone
Role of the tricarboxylic acid cycle in the stimulation of sodium transport by --- (Falchuk, Sharp) (153) 706

Aldosterone
Stimulation by --- of a rapidly labelled RNA fraction in toad bladder tissue (Rousseau, Crabbé) (157) 25

Algae
Energy-transfer and electron-transfer systems in algal photosynthesis. II. Oxidation-reductions of two photochemical systems in red --- (Nishimura) (153) 838

Algae
Low-temperature fluorescence spectrum of blue-green and red --- (Goedheer) (153) 903

Algae
Quantitative thin-layer chromatography of chlorophyll and carotenoid from marine --- (Jeffrey) (162) 271

Aliphatic δ-lactones
Incorporation of $[1\text{-}^{14}C]$ acetate into the --- of ruminant milk fat (Walker, Patton, Dimick) (152) 445

Alkaline denaturation
--- of DNA's from various sources (Zimmer) (161) 584

Alkaline phosphatase
Chromatographic separation, the activation and inactivation of --- from chicken intestine (Schüssler) (151) 383

Alkaline phosphatase
Estimate of the catalytic-centre activity and purity of human --- preparations (Moss, Eaton, Scutt) (154) 609

Alkaline phosphatase
Human placental ---: Molecular weight and subunit structure (Gottlieb, Sussman) (160) 167

Alkaline phosphatase
Inhibition of the synthesis of --- of Bacillus megaterium KM by a novel protoplast-bursting factor obtained from Bacillus subtilis 202-7 (Arima, Tsukagoshi, Tamura) (163) 121

Alkaline phosphatase
Inorganic pyrophosphatase activity of human placental --- (Sussman, Laga) (151) 281

Alkaline phosphatase
Resistance of --- of human serum to the protease of Streptomyces griseus (Goldsmith, Robinson) (159) 405

Alkaline phosphatase
Separation and study of the antigenic properties of peptides obtained by degradation of gliadin by different preparations of --- (Escribano, Daquo) (160) 69

Alkaline phosphatase isozymes
Immunochemical characterization of --- of the young mouse duodenum (Etzler) (154) 150

Alkylating agent
DNA methylated in vitro by a monofunctional --- as a substrate for a specific nuclease from Micrococcus lysodeikticus (Strauss, Robbins) (161) 68

Alkylating agents
Effects of --- on the induced synthesis of β-galactosidase by Escherichia coli B_{S-1} (Venitt, Brookes, Lawley) (155) 521

Alkylating agents
Techniques for hybridization of DNA in vitro using non-radioactive DNA and DNA made radioactive by neutron activation, alkylation with radioactive ---, and by exchange with ^3H_2O (Searcy) (166) 360

Alkylation
Techniques for hybridization of DNA in vitro using non-radioactive DNA and DNA made radioactive by neutron activation, --- with radioactive alkylating agents, and by exchange with ^3H_2O (Searcy)(166) 360
Alkylation of sterols
H-migration in the --- at C-24 (Raab, De Souza, Nes)(152) 742
Alkyl substituents
Purine stacking: Effects of --- (Helmkamp, Kondo)(157) 242
Alkylthiohaemoglobins
Formation of --- and the structure of their haematin groups (Nichol, Morell)(158) 226
Alloxan
Reaction of --- with thiol groups of proteins. Blockage of the reactivation of reduced ribonuclease (Younathan, Rudel) (168) 11
Alloxan diabetes
Effect of --- on polyenoic fatty acid synthesis by retinal tissue (Futterman, Rollins, Vacano)(164) 433
Alloxan-induced diabetes
Nature of the increase in liver microsomal glucose-6-phosphatase activity during the early stages of --- (Jakobsson, Dallner) (165) 380
Amber mutants
Virus-specific proteins in Escherichia coli infected with some --- of phage MS2 (Viñuela et al.)(155) 558
Ambystoma mexicanus
Na^+ transport across the isolated skin of --- (Aceves, Erlij, Edwards)(150) 744
Amino acid
Detection of aromatic --- derivatives on thin-layer chromatograms by various electron acceptors (Burstein, Fridkin, Shinitzky)(160) 141
Amino acids
Electron spin resonance of iron–nitric oxide complexes with ---, peptides and proteins (Woolum, Tiezzi, Commoner)(160) 311
Amino acids
Transaminases of branched chain ---. V. Activity change in developing and regenerating rat liver (Ichihara, Takahashi) (167) 274
Amino acid-acceptor activity
RNA with --- isolated from an oncogenic virus (Trávnicek)(166) 757
Amino acid accumulation
Influence of size of rat renal cortex slices on --- (Smith, Segal)(163) 281
Amino acid accumulation
--- in toad bladder: Relationship to transepithelial sodium transport (Thier)(150) 253
Amino acid active transport
Interaction between cells. II. Dependence of --- on the cell concentration (Bladé, Blat, Harel)(156) 157
Amino acid analysis
Determination of the molecular weight of a protein most closely corresponding to its --- (Delaage)(168) 573
Amino acid distribution
Effect of non-metabolizable analogs on the --- in the rat (Christensen, Cullen)(150) 237
Amino acid incorporating system
In vitro --- for liver, brain and skeletal muscle ribosomes (Cooper, Muramatsu, Wannemacher Jr.)(169) 269
Amino acid incorporation
Alterations in vitro of --- activity of liver preparations of non-starved normal and stress-induced rats (Von der Decken) (166) 487
Amino acid incorporation
Biosynthesis of bacitracin. II. ^{14}C-labelled --- into bacitracin by a cell-free preparation from Bacillus licheniformis (Ishihara, Sasaki, Shimura)(166) 496
Amino acid incorporation
--- by cell-free extracts of Neurospora crassa (Lee, DeBusk)(157) 427
Amino acid incorporation
--- by a cell-free system prepared from human cells cultured in vitro (Perani et al.) (161) 223
Amino acid incorporation
Effects of polyamino acids, histones and heparin on --- into ribosomal proteins from rat liver (Berlinguet, Normand) (161) 509
Amino acid incorporation
--- by isolated mitochondria in the presence of cycloheximide (Loeb, Hubby)(166) 745
Amino acid incorporation
Lability of in vitro --- systems of sea urchin eggs in relation to nuclease release and other factors (Castañeda, Tyler)(166) 741
Amino acid incorporation
--- into proteins in isolated rat liver nuclei (Ono, Terayama)(166) 175
Amino acid incorporation
---into ribonucleoprotein particles prepared from rabbit mammary glands during pregnancy and lactation (Baird, Herriman) (166) 162
Amino-acid oxidases
Photoreduction of --- in the presence of free flavin and the effect of urea (Koster, Veeger, McCormick)(153) 724
Amino-acid oxidases
Relation between temperature-inducible allosteric effects and the activation energies of --- (Koster, Veeger)(167) 48
D-Amino-acid oxidase
Catalytic mechanism of --- (Koster, Veeger) (151) 11
D-Amino-acid oxidase
Circular dichroic spectra of --- and its complexes (Kotaki, Sugiura, Yagi)(151) 689
D-Amino-acid oxidase
Detection of complex of --- and D-alanine by rapid scan spectrophotometry (Watari et al.)(167) 184
D-Amino-acid oxidase
--- in Fusarium (Chiari)(165) 127
D-Amino-acid oxidase
Mechanism of enzyme action. III. Crystallization of the semiquinoid form of --- (Yagi et al.)(151) 343
D-Amino-acid oxidase
Mechanism of enzyme action. IV. Isolation by crystallization of the fully reduced form of --- (Yagi et al.)(159) 1
L-Amino-acid oxidase
Molecular weight of mammalian --- from rat kidney (Nakano, Tarutani, Danowski) (168) 156
L-Amino-acid oxidase
Studies on ---. I. Effects of pH and competitive inhibitors (De Kok, Veeger)(167) 35
Amino acid separation
Two procedures for accelerated --- by column chromatography (Bairos, Bairos) (168) 567

- Amino acid sequences
  - Tentative nomenclature rules. A one-letter notation for --- (IUPAC-IUB Commission on Biochemical Nomenclature)(168) 6
- Amino acid transaminases
  - Branched chain ---. IV. Purification and properties of two enzymes from rat liver (Aki, Ogawa, Ichihara)(159) 276
- Amino acid transport
  - Effect of storage at 4° on --- by rat renal cortex slices (Lowenstein et al.)(150) 416
- Amino acid transport
  - --- into the estrogen-primed uterus. I. General characteristics of the uptake in vitro (Riggs, Pan, Feng)(150) 92
- Amino acid transport
  - Interaction between cells. I. Influence of cell concentration on --- and protein synthesis (Bladé, Harel)(156) 148
- Amino acid transport
  - --- by isolated rabbit renal tubules (Hillman, Albrecht, Rosenberg)(150) 528
- Amino acid transport
  - --- in the rat renal papilla (Lowenstein, Smith, Segal)(150) 73
- Amino acid transport
  - --- by the small intestine of the rat. Effects of glucose on transintestinal proline transport and valine transport (Munck)(150) 82
- Amino acid transport
  - --- by the small intestine of the rat. Evidence against interactions between sugars and amino acids at the carrier level (Munck)(156) 192
- Amino acid transport
  - --- and sugar transport in rat-liver slices (Crawhall, Segal)(163) 163
- Amino acid uptake
  - Ion dependence of --- in brain slices (Margolis, Lajtha)(163) 374
- Amino acid uptake
  - New gene which affects neutral and acidic --- in Neurospora crassa (Jacobson, Metzenberg)(156) 140
- Aminoacyltransferase I
  - Isolation and biological activity of multiple forms of --- of rat liver (Schneir, Moldave) (166) 58
- Aminoacyl transfer RNA
  - Binding of --- to complexes of Escherichia coli ribosomes and plant viral RNA (Verhoef, Kraal, Bosch)(155) 456
- Aminoacyl transfer RNA
  - Cupric ion catalysis in hydrolysis of --- (Schofield, Zamecnik)(155) 410
- Aminoacyl transfer RNA
  - Effect of 5'-terminal phosphate on the recognition of some dinucleoside phosphates by [^{14}C]--- (Grünberger, Holý, Šorm) (157) 439
- Aminoacyl transfer RNA
  - Modified ---. IV. The behaviour of acyl [^{14}C] phenylalanyl-tRNA in a ribosomal system from wheat germ (De Groot et al.)(161) 137
- Aminoacyl transfer RNA
  - Selective loss of binding of --- by ribosomes treated with diethanoldisulfide (Furano) (161) 235
- α-Aminobutyric acid
  - Control of isoleucine, valine and leucine biosynthesis. V. Dual effect of --- on repression and end-product inhibition in Escherichia coli (Freundlich, Clarke)(170) 271
- bis(2-Amino-2-carboxyethyl) trisulphide
  - Nuclear magnetic resonance spectra of --- and other sulphur-containing amino acids relevant to wool structure (Bartle et al.) (160) 106
- 2-Aminoethylphosphonate
  - Identification of 2-phosphonoacetaldehyde as an intermediate in the degradation of --- by Bacillus cereus (La Nauze, Rosenberg)(165) 438
- 2-Aminoethylphosphonic acid
  - Biosynthesis of --- in Tetrahymena (Horiguchi, Kittredge, Roberts)(165) 164
- β-Aminoisobutyrate-α-ketoglutarate transaminase
  - --- in relation to β-aminoisobutyric aciduria (Kakimoto et al.)(156) 374
- α-Aminoisobutyric acid
  - Influence of testosterone on penetration of --- and 2-deoxyglucose in male rat sex accessory tissues (Mills, Spaziani)(150) 435
- α-Aminoisobutyric acid
  - --- uptake in vitro by the rat extensor digitorum longus muscle after denervation and tenotomy (Bombara, Bergamini) (150) 226
- α-Aminoisobutyric acid transport
  - --- by separated rabbit renal tubules (Johnston, Bartlett, Podsiadly)(163) 418
- β-Aminoisobutyric aciduria
  - β-Aminoisobutyrate-α-ketoglutarate transaminase in relation to --- (Kakimoto et al.) (156) 374
- δ-Aminolaevulinate
  - Effect of carbohydrate on --- synthetase: The role of RNA (Hickman et al.)(161) 197
- δ-Aminolaevulinate dehydratase
  - Porphyrin biosynthesis in soybean callus tissue system. Isolation, purification and general properties of --- (Tigier, Batlle, Locascio)(151) 300
- δ-Aminolaevulinate synthetase
  - Characterization and measurement of --- in bone marrow cell mitochondria (Bottomley, Smithee)(159) 27
- 2-Amino-6-(methylthio) caproic acid
  - ---, a methionine homolog and precursor of progoitrin (Lee, Serif)(165) 569
- D-1-Aminopropan-2-ol
  - Enzymic oxidation of --- by diol dehydrogenases of microbial origin (Lowe, Turner) (170) 455
- D_g-1-Amino-2-propanol
  - Formation of --- by a highly purified enzyme from Escherichia coli (Dekker, Swain) (158) 306
- Aminopropanol dehydrogenase
  - --- activity in rat-liver preparations (Cox, Turner, Willetts)(170) 438
- Amino sugar metabolism
  - --- in erythrocytes (Kornfeld, Noll)(170) 77
- Ammonium cyanide
  - Studies on pre-biological evolution. III. Azulmic acids obtained from --- (Labadie, Jensen, Neuzil)(165) 525
- Ammonium interactions
  - --- with proteins (Barker)(168) 447
- AMP
  - Adenine nucleotide metabolism of blood platelets. I. Adenosine kinase and nucleotide formation from exogenous adenosine and --- (Holmsen, Rozenberg)(155) 326
- 3',5'-cyclic AMP
  - Action of noradrenalin and oxytocin on the active sodium transport and the permeability of frog skin to water. Role of --- (Bastide, Jard)(150) 113

3',5'-cyclic AMP
  Enhancement of phosphoryl transfer by --- in the presence of a membranous fraction from canine kidney (Cunningham) (165) 574
3',5'-cyclic AMP
  Kinetic analysis of the effect of oxytocin on the water permeability of frog bladder. Role of --- (Bourguet)(150) 104
AMP aminohydrolase
  Influence of ascorbic acid on the cytoplasmic --- of the rat brain (Kluge, Wieczorek) (167) 621
AMP aminohydrolase
  Muscle ---. I. Some regulatory properties of rat skeletal muscle enzyme (Ronca, Raggi, Ronca-Testoni)(167) 626
AMP deaminase
  Alkali cation-activated --- of erythrocytes: Some properties of membrane-bound enzyme (Rao, Hara, Askari)(151) 651
AMP deaminase
  Regulation of --- by 2,3-diphosphoglyceric acid: A possible mechanism for the control of adenine nucleotide metabolism in human erythrocytes (Askari, Rao)(151) 198
AMP nucleosidase
  Dissociation and association of --- from Azobacter vinelandii (Yoshino et al.) (167) 216
AMP-rich RNA
  Presence of --- in counter-current distribution and column chromatography fractions of pea root nucleic acids (Ewing, Cherry)(161) 331
Amylase
  Action of insulin on the biosynthesis of --- and some other enzymes of rat pancreas (Palla, Abdeljlil, Desnuelle)(158) 25
Amylase A
  Introduction of sulphydryl groups into Taka- --- and changes in enzymic activity (Suzuki, Hachimori, Matoba)(167) 641
Amylase
  Release of --- from zymogen granules by ATP and a low concentration of Ca^{2+} (Yoshida et al.)(158) 489
α-Amylases
  Chromatographic purification of isoenzymes of human --- (Aw, Hobbs, Wootton) (168) 362
α-Amylase
  --- and lipase of the pancreas of the rat. Chromatographic purification, molecular weight determination and amino acid composition (Vandermeers, Christophe) (154) 110
Amylase isoenzymes
  --- in chick embryo pancreas (Heller, Kulka)(165) 393
Amylase secretion
  --- in rat parotid slices by apparent activation of endogenous catecholamine (Schramm)(165) 546
Amylo-1,6-glucosidase-oligo-1,4 → 1,4-transferase
  Reinvestigation of the pH optimum in terms of the action and properties of rabbit muscle --- (Nelson, Kolb, Larner)(167) 212
Anabaena flos-aquae
  Electrodialysis of --- (Tischer et al.)(156) 403
Anacystis nidulans
  Purification and characterization of the fructose diphosphate aldolases from --- and Saprospira thermalis (Willard, Gibbs) (151) 438
Androgen biosynthesis
  ---. I. Enzymatic cleavage of the cholesterol side-chain to dehydroepiandrosterone and 2-methylheptan-6-one (Jungmann) (164) 110
Androgen biosynthesis
  Pathways for --- from [7α-^{3}H] pregnenolone and [4-^{14}C] progesterone by rat testis interstitium in vitro (Bell et al.)(164) 412
Androstendione
  [11α-^{3}H] Cortisol as hydrogen donor in the reduction of --- and estrone in rat liver tissue (Wenzel)(152) 431
5α-Androst-16-en-3-one biosynthesis
  --- from progesterone by boar testic homogenate (Katkov, Gower)(164) 134
Anesthetics
  Intramembrane location of alcohol --- (Schneider)(163) 451
Angiotensin
  Effect of --- on renal carbonic anhydrase (Healy, Douglas)(151) 520
Angiotensin I
  Enzymatic degradation and electrophoresis of human --- (Arakawa et al.)(168) 106
Angiotensin II
  Degradation of --- by a carboxypeptidase of rabbit liver (Johnson, Ryan)(160) 196
Angiotensin II
  Influence of pH on the conformation of --- and analog peptides (Franze de Fernández, Delius, Paladini)(154) 223
Anionic dependence
  --- of sodium transport in frog skin (Tonbnies Gil Ferreira)(150) 587
Anomeric nucleosides
  Optical rotatory dispersion of the --- and nucleotides (Nishimura, Shimizu, Iwai) (157) 221
Anthramycin
  ---, a new type of DNA-inhibiting antibiotic: Reaction with DNA and effect on nucleic acid synthesis in mouse leukemia cells (Kohn, Bono Jr., Kann Jr.)(155) 121
Antibiotic
  Anthramycin, a new type of DNA-inhibiting ---: Reaction with DNA and effect on nucleic acid synthesis in mouse leukemia cells (Kohn, Bono Jr., Kann Jr.)(155) 121
Antibiotics
  Biogenesis of mitochondria. IV. The differentiation of mitochondrial and cytoplasmic protein synthesizing systems in vitro by --- (Lamb, Clark-Walker, Linnane) (161) 415
Antibiotic
  Effect of cholesterol incorporation on the sensitivity of liposomes to he polyene ---, filipin (Kinsky et al.)(152) 174
Antibiotics
  Inhibition of bacterial RNA synthesis by the rifamycin --- (Wilhelm, Oleinick, Corcoran)(166) 268
Antibiotics
  Interaction of polyene --- with single and mixed lipid monomolecular layers (Demel et al.)(150) 1
Antibodies
  Inhibition of acceptor activity of tRNA by specific --- against tRNA (Pulkrábek, Raška Jr., Rychlík)(157) 652
Anticodons
  Different --- in purified valine transfer RNA fractions from yeast (Mirzabekov et

al.)(166) 75

Antifibrinolytic agents
  Plasmin inhibition by synthetic --- in relation to the type of substrate (Lukasiewicz et al.)(159) 503

Antimycin
  Binding of --- to the respiratory chain (Bryla, Kaniuga)(153) 910

Antimycin
  Reversibility of --- inhibition (Howland) (153) 309

Antimycin
  Studies on the mechanism of inhibition of the mitochondrial electron transport by ---. I. Reversal of the inhibition by diethyl ether extraction (Kaniuga, Gardas, Bryla) (153) 60

Antivitamins
  Effect of --- on the microbiological biosynthesis of vitamins. III. Relation between amounts of thiamine, thiamine monophosphate and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (Šicho, Králová)(165) 459

Aorta
  Cardiovascular studies on copper-deficient swine. XI. Mucopolysaccharides and the mechanical properties of the --- (Coulson, Linker)(158) 117

Aorta
  Isolation and amino acid composition of insoluble elastin. Bovine foetal and adult --- and ligamentum nuchae (Steven, Jackson)(168) 334

Aorta
  Pattern of lysine incorporation into elastin of growing chick --- (Sandberg, Cleary) (154) 411

D-Apiose biosynthesis
  ---. IV. Formation of uridine diphosphate-apiose from uridine diphosphate-D-glucuronic acid in cell-free extracts of parsley (Apium petroselium L.) and Lemna minor (Sandermann Jr., Tisue, Grisebach) (165) 550

Apium petroselium L.
  D-Apiose biosynthesis. IV. Formation of uridine diphosphate-apiose from uridine diphosphate-D-glucuronic acid in cell-free extracts of parsley (---) and Lemna minor (Sandermann Jr., Tisue, Grisebach) (165) 550

Apium petroselium L.
  Occurrence of uridine diphosphate-apiose in parsley (---) (Sandermann, Grisebach) (156) 435

Apohaemoglobin
  Preparation of mesoporphyrin IX and copper mesoporphyrin and manganese mesoporphyrin complexes of --- (Simo, Javaherian, Fabry)(160) 118

Aquatic animals
  Structural elucidation of sphingoethanolamine and its distribution in --- (Hori, Sugita, Arakawa)(152) 211

α-9-D-Arabinofuranosyladenine
  Synthesis of β- and --- by phenylpolyphosphate (Lünzmann, Schramm)(169) 263

β-9-D-Arabinofuranosyladenine
  Synthesis of α-and --- by phenylpolyphosphate (Lünzmann, Schramm)(169) 263

Arachidonic acid
  Effect of --- on the microsomal desatura-tion of linoleic acid into γ-linolenic acid and their simultaneous incorporation into the phospholipids (Nervi, Brenner, Peluffo) (152) 539

Arachidonic acid
  Preferred metabolic pathway from linoleic acid to --- in vitro (Marcel, Christiansen, Holman)(164) 25

2-Arachidonyl-lecithin
  Action of prostaglandin synthetase on --- (Vonkeman, Van Dorp)(164) 430

Arbacia punctulata
  Ribosomal RNA of --- (Sy, McCarty) (166) 571

Arginase
  Derepression of --- and of ornithine transaminase in nitrogen-starved baker's yeast (Middelhoven)(156) 440

Arginase
  Low molecular weight --- in the earthworm (Reddy, Campbell)(159) 557

Arginine
  --- transfer reaction (Soffer)(155) 228

Arginine accumulation
  --- by dog kidney cortex mitochondria (Keller)(153) 113

Arginine oxygenase (decarboxylating)
  ---.V. Purification and flavin nature (Olomucki et al.(151) 353

Arion ater
  Biosynthesis of ether-containing phospholipids in the slug,---. III. Origin of the vinylic ether bond of plasmalogens (Thompson Jr.) (152) 409

Aromatic amino acids
  m-Carboxy-substituted --- in plant metabolism. IV. Transformation of 3-(3-carboxyphenyl)alanine into 3-(3-carboxy-4-hydroxyphenyl)alanine in Reseda lutea L. and Reseda odorata L. (Larsen, Sørensen) (156) 190

Aromatic amino acid
  Detection of --- derivatives on thin-layer chromatograms by various electron acceptors (Burstein, Fridkin, Shinitzky)(160) 141

Aromatic aminotransferase
  Brain ---. I. Purification and some properties of pig brain L-phenylalanine-2-oxoglutarate aminotransferase (George, Gabay)(167) 555

Aromatic biosynthesis
  --- in yeast. II. Feedback inhibition and repression of 3-deoxy-D-arabino-heptulosonic acid 7-phosphate synthase (Doy) (151) 293

Aromatic hydrocarbons
  Hydrophobic interaction of polycyclic --- with human serum albumin (Franke) (160) 378

Arrhenius activation
  Kinetics of malonamide-induced haemolysis of mammalian erythrocytes. I. The --- parameters (Coldman, Good)(150) 194

Arsenite
  Formation of dicarbonyls from monosaccharides and --- (Jellum)(170) 430

Arterial tissue
  Phospholipases in ---. II. Phosphatide acylhydrolase and lysophosphatic acyl-hydrolase activity in human and rat arteries (Eisenberg, Stein, Stein)(164) 205

Arthrobacter
  Primary structure at the DFP-reacting site of a proteinase from a strain of --- (Wählby) (151) 409

Arylsulphatase A

Cerebroside 3-sulphate as a physiological substrate of --- (Mehl, Jatzkewitz)(151) 619

Ascaris
Properties of ribosomes from eggs of --- at different stages of development (Grummt, Bielka)(161) 253

Ascaris lumbricoides var. suum
Amino acid sequence of a trypsin inhibitor isolated from ascaris (---) (Fraefel, Acher) (154) 615

Ascites cells
Ribosomal subunits of Landschütz --- during changes in polysome distribution (Hogan, Korner)(169) 129

Ascites tumour cell
Role of ribosomal subunits and 80-S monomers in polysome formation in an --- (Hogan, Korner)(169) 139

Ascorbic acid
Influence of --- on the cytoplasmic AMP aminohydrolase of the rat brain (Kluge, Wieczorek)(167) 621

L-Ascorbic acid
Lysis of glycosides in the presence of --- (Caygill)(170) 1

Ascorbic acid sulphate
--- as a sulphating agent (Mumma)(165) 571

L-Asparaginase
Inhibition of HeLa cell cultures by preparations of Escherichia coli --- (Kim et al.) (158) 476

Asparagine synthesis
--- in guinea pig liver (Holcenberg, Pease) (158) 500

Aspartate aminotransferase
Reconstituted ---. Physical studies (Farrelly, Churchich)(167) 280

Aspartokinase
Concerted feedback inhibition of --- from Bacillus stearothermophilus (Kuramitsu) (167) 643

Aspergillus nidulans
Evidence for an alternative pathway of xanthine oxidation in --- (Darlington, Scazzocchio)(166) 569

Aspergillus nidulans
Induction and repression of the enzymes of purine breakdown in --- (Scazzocchio, Darlington)(166) 557

Aspergillus nidulans
Regulation of sugar utilization by --- (Romano, Kornberg)(158) 491

Aspergillus niger
Enzymatic degradation of linseed mucilage. I. Isolation and characterization of extracellular enzyme produced by --- (Kaláč, Rexová)(167) 590

Aspergillus ochraceus
Microbial hydroxylations. II. Oxidative cleavage of the 17β-acetyl side-chain of progesterone by --- (Tan, Smith)(152) 758

Aspergillus oryzae
Studies on the conidia of ---. VII. Development of protein synthesizing activity during germination (Horikoshi, Ikeda) (166) 505

Athiorhodaceae
Quinones of --- (Maroc, De Klerk, Kamen) (162) 621

ATP
Adenine nucleotide metabolism of blood platelets. IV. Platelet aggregation response to exogenous --- and ADP (Rozenberg, Holmsen)(157) 280

ATP
Effects of --- and Na^+ on a K^+-activated phosphatase from erythrocyte cell membranes (Rega, Garrahan, Pouchan) (150) 742

ATP
Inhibition of citrate synthase by --- (Jangaard, Unkeless, Atkinson)(151) 225

ATP
Inhibition of deoxycytidylic acid kinase and deoxyguanylic acid kinase activity by --- and dATP in pneumococci (Firshein, Broker)(166) 261

ATP
Mitochondrial citrulline synthesis with exogenous --- (Graafmans, Charles, Tager) (153) 916

ATP
Multiple inhibitor sites for --- on muscle phosphofructokinase as influenced by a change of pH: A computer analysis of "non-linear" kinetic data (Ui)(159) 50

ATP
Stimulatory effect on Na^+ and --- on the release of acetylcholine from synaptic vesicles (Matsuda, Hata, Yoshida)(150) 739

ATP-binding protein
Properties of an --- isolated from membranes of nerve endings (Abood, Matsubara) (163) 539

ATP determination
Interference of myokinase in the --- by luciferase assay (De Leo, Giovannozzi-Sermanni)(170) 208

ATP level
In vitro studies of beating-heart cells in culture. XI. The --- and contractions of the heart cells (Seraydarian, Harary, Sato) (162) 414

ATP synthesis
--- in intact cells of Rhodospirillum rubrum and Rhodopseudomonas spheroides on oxygenation or illumination (Ramirez, Smith)(153) 466

ATPase
Activation by leucine of ouabain-sensitive --- of HeLa cells (Mohri et al.)(150) 537

ATPase
Anion-stimulated --- from the potassium transport midgut of the larva of Hyalophora cecropia (Turbeck, Nedergaard, Kruse) (163) 354

ATPase
Approximation of molecular weight of (Na^+ - K^+)- --- (Mizuno et al.)(168) 311

ATPase
Comparison of sources of a phosphorylated intermediate in transport --- (Bader, Post, Bond)(150) 41

ATPase
Effects of alkali metal ions on the Mg^{2+}-activated --- activity of reconstituted actomyosin (Katz)(162) 79

ATPase
Effect of hydroxylamine and N-methylhydroxylamine on beef brain microsomal (Na^+ + K^+)- --- (Chignell, Titus)(159) 345

ATPase
Effect of monovalent cations on the dinitrophenol-induced --- of rat-liver mitochondria (Amons, Van den Bergh, Slater) (162) 452

ATPase
Effect of proteinase on the (Na^+ + K^+)-activated --- system of rat brain (Somogyi) (151) 421

- ATPase
  - Effect of substrates and products on beef brain microsomal (Na$^+$ + K$^+$ + Mg^{2+})- --- activity (Baskin, Leslie)(159) 509
- ATPase
  - Elicitation of the brain microsomal (Mg^{2+} - Ca^{2+})-activated --- by digitonin treatment (Nakamura, Konishi)(159) 206
- ATPase
  - Inhibition by anions of dinitrophenol-induced --- of mitochondria (Veldsema-Currie, Slater)(162) 310
- ATPase
  - Ion translocase system from rabbit intestinal mucosa. Preparation and properties of the (Na$^+$ - K$^+$)-activated --- (Richardson) (150) 572
- ATPase
  - Irreversible inactivation of (Na$^+$ - K$^+$)-dependent --- and K$^+$-dependent phosphatase by fluoride (Yoshida et al.)(150) 162
- ATPase
  - Levels of (Na$^+$ - K$^+$)-activated --- and Mg^{2+}-activated --- activity in bovine and feline corneal endothelium and epithelium. (Rogers)(163) 50
- ATPase
  - Manganese activation of a (Na$^+$ - K$^+$)-dependent --- in pig brain microsomes (Atkinson, Hunt, Lowe)(167) 469
- ATPase
  - Mechanism of cardiac glycoside inhibition of the (Na$^+$ – K$^+$)-dependent --- from cardiac tissue (Matsui, Schwartz)(151) 655
- ATPase
  - Membrane-associated --- activity from Micrococcus lysodeikticus (Munoz et al.) (150) 531
- ATPase
  - Molecular size of the calcium-transport --- of sarcotubular vesicles estimated from radiation inactivation (Vegh et al.)(163) 266
- ATPase
  - (Na$^+$ - K$^+$)-activated --- in renal cell membranes of normal and methylprednisolone-treated rats (Manitius, Bensch, Epstein) (150) 563
- ATPase
  - Oxidative phosphorylation in yeast. III. --- activity of the mitochondrial fraction from a cytoplasmic respiratory-deficient mutant (Kováč, Weissová)(153) 55
- ATPase
  - Regulation of the (Na$^+$ + K$^+$)-activated --- enzyme system in rat kidney. I. The effect of adrenalectomy and the supply of sodium on the enzyme system (Jörgensen)(151) 212
- ATPase
  - Relationship of Na$^+$, K$^+$ and Mg-ATP binding sites for the human erythrocyte stromal (Na$^+$ + K$^+$)-dependent --- (Masiak, Green)(159) 340
- ATPase
  - Requirement of ubiquinone-10 for the ATP-forming system and --- system of chromatophores from Rhodospirillum rubrum (Horio et al.)(153) 913
- ATPase
  - Stimulative and protective action of Sr^{2+} and Ba^{2+} on (Na$^+$-K$^+$)- --- from cultured heart cells (Henn, Sperelakis)(163) 415
- ATPase
  - Studies on (Na$^+$ - K$^+$)- activated ---. XIX. Occurrence and properties of a (Na$^+$ - K$^+$)-activated ATPase in Escherichia coli (Hafkenscheid, Bonting)(151) 204
- ATPase
  - Studies on (Na$^+$ - K$^+$)-activated ---. XX. Properties of (Na$^+$ - K$^+$)-activated ATPase in rat liver (Bakkeren, Bonting)(150) 460
- ATPase
  - Studies on (Na$^+$ - K$^+$)-activated ---. XXI. Changes in (Na$^+$ - K$^+$)-activated ATPase activity and ouabain-sensitive ^{86}Rb$^+$ uptake rate in regenerating rat liver (Bakkeren, Bonting)(150) 467
- ATPase
  - Studies on plasma membranes. VI. Differences in the effect of temperature on the --- and (Na$^+$ - K$^+$)- --- activities of plasma membranes isolated from rat liver and hepatoma (Emmelot, Bos)(150) 354
- ATPase
  - Thallium activation of the (Na$^+$ - K$^+$)-activated --- of rabbit kidney (Britten, Blank) (159) 160
- ATPase activity
  - Influence of β-mercaptoethanol on the aggregation state and --- of the H-meromyosin of the bovine carotid (Gaspar-Godfroid) (167) 622
- ATP citrate lyase
  - Role of --- in the transfer of acetyl groups in rat liver (Daikuhara, Tsunemi, Takeda) (158) 51
- ATP:guanidine phosphotransferases
  - Active site of ---. I. Reaction of the essential ε-NH$_2$ lysine groups with 1-dimethylaminonaphthalene-5-sulphonylchloride (Kassab, Roustan, Pradel)(167) 308
- ATP:guanidine phosphotransferases
  - Active site of ---. II. Evidence for a critical histidine residue through use of a specific reagent, diethylpyrocarbonate (Pradel, Kassab)(167) 317
- ATP:guanidine phosphotransferase
  - Differential spectrophotometry of --- -substrate complexes (Roustan, et al.)(167) 326
- ATP:guanidinoacetate phosphotransferase
  - Properties and amino acid composition of purified --- (Pradel et al.)(154) 305
- ATP:D-hexose 6-phosphotransferases
  - Apparent molecular weights of some ---: Specific effects of Sephadex G-100 (Pilkis, Hansen, Krahl)(154) 250
- ATP:D-hexose 6-phosphotransferase
  - Resolution of two high-K$_m$ --- bands by starch-gel electrophoresis (Pilkis, Hansen) (159) 189
- ATP:sulphate adenylyltransferase
  - Comparative effects of vitamin A deficiency and controlled food consumption on --- (Geison, Rogers Jr., Johnson)(165) 448
- ATP:sulphate adenylyltransferase
  - Purification and properties of --- from liver (Panikkar, Bachhawat)(151) 725
- Avenaciolide
  - Effects of Bacillus subtilis protease, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose utilization and its inhibition by ---, piericidin A and puromycin (Kuo)(165) 208
- Axons
  - Effect of temperature and metabolic inhibitors on calcium outflow from squid giant --- (Rojas, Hidalgo)(163) 550
- Axons
  - Sodium transport and perfused --- (Baker et al.)(163) 560
- Axonal conduction

Demonstration of phospholipid splitting as the factor responsible for increased permeability and block of --- induced by snake venom. II. Study on squid axons (Condrea, Rosenberg)(150) 271

5-Azacytidine
Incorporation of --- into nucleic acids of Escherichia coli (Pačes, Dockočil, Šorm) (161) 352

5-Azacytidine
Thymidine kinase and polyribosome distribution in regenerating rat liver following ---(Čihák, Veselá, Šorm)(166) 277

Azaguanine
--- inhibition of protein synthesis. III. Site of action in HeLa cells (Zimmerman)(157) 378

8-Azaguanine
Modified induction of hepatic tyrosine transaminase in --- -treated rats (Levitan, Webb)(155) 632

8-Azaguanosine
Synthesis and coding properties of --- -containing triribonucleoside diphosphates (Grünberger, Holý, Šorm)(161) 147

Azotobacter vinelandii
Effect of combined-nitrogen sources on the synthesis and function of the electron-transport system of --- (Knowles, Redfearn) (162) 348

Azotobacter vinelandii
Polyribosomes in ---. I. Isolation, characterization and distribution of ribosomes, polyribosomes and subunits in logarithmically growing Azotobacter (Oppenheim et al.)(161) 386

Azotobacter vinelandii
Properties of an NADH-benzyl viologen reductase from --- (Nagai, Elleway, Nicholas)(153) 766

Azulmic acid
Studies on pre-biological evolution. III. --- obtained from ammonium cyanide (Labadie, Jensen, Neuzil)(165) 525

Azurins
Optical and magnetic properties of Pseudomonas --- (Brill, Bryce, Maria)(154) 342

B

- Bacillus brevis
  - Tyrocidine biosynthesis by a cell-free enzyme system of --- ATCC 8185. II. Amino acid substitution in tyrocidine (Fujikawa et al.) (169) 520
- Bacillus cereus
  - Isolation of a mutant of --- deficient in phosphate uptake (Rosenberg, La Nauze) (156) 381
- Bacillus cereus
  - --- spore germination: Absolute requirements for an amino acid (Warren, Gould) (170) 341
- Bacillus licheniformis.
  - Threonine dehydratase of ---. I. Purification and properties (Leitzmann, Bernlohr) (151) 449
- Bacillus licheniformis
  - Threonine dehydratase of ---. II. Regulation during development (Leitzmann, Bernlohr) (151) 461
- Bacillus megaterium
  - Endopeptidase activity isolated from --- (Millet, Acher) (151) 302
- Bacillus natto
  - Compositions of phosphatides from --- at various growth phases (Urakami, Umetani) (164) 64
- Bacillus stearothermophilus
  - Protein synthesis and ribosomal distribution at different growth stages in --- (González, Goldemberg, Algranati) (166) 760
- Bacillus subtilis
  - Catabolite repression of aconitate hydratase in --- (Cox, Hanson) (158) 36
- Bacillus subtilis
  - Effects of --- protease, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose utilization and its inhibition by avenaciolide, piericidin A and puromycin (Kuo) (165) 208
- Bacillus subtilis
  - Genetic similarity between the ribosomal RNA from spores and vegetative cells of --- (Bishop, Doi) (169) 278
- Bacillus subtilis
  - Mechanism of the paradoxical stimulation of ribonuclease synthesis in --- by actinomycin D (May et al.) (169) 260
- Bacillus subtilis
  - Non-identity of the site of action of erythromycin A and chloramphenicol on --- ribosomes (Oleinick, Wilhelm, Corcoran) (155) 290
- Bacillus subtilis
  - Phenolic acids and iron transport in --- (Peters, Warren) (165) 225
- Bacillus subtilis
  - Regulation of synthesis of 2,3-dihydroxybenzoic acid in --- by iron and a biological secondary hydroxamate (Byers, Lankford) (165) 563
- Bacillus thuringiensis
  - Inhibition of DNA-dependent RNA polymerase by the exotoxin of --- var. gelechiae (Šebesta, Horská) (169) 281
- Bacitracin
  - Biosynthesis of ---. II. ^{14}C-labeled amino acid incorporation into bactracin by a cell-free preparation from Bacillus licheniformis (Ishihara, Sasaki, Shimura) (166) 496
- Bacteria
  - Adaptation of mesophilic --- to growth at elevated temperatures (Dowben, Weidenmüller) (158) 255
- Bacteria
  - Size and shape of --- by light scattering measurements (Koch, Ehrenfeld) (165) 262
- Bacteriochlorophyll
  - Interaction of a spinach protein factor with --- (Terpstra) (153) 675
- Bacteriochlorophyll
  - Kinetic study of --- pheophytinization in the protein complex from a green photosynthetic bacterium (Ghosh, Bròker, Olson) (162) 402
- Bacteriochlorophyll-protein
  - Effects of denaturants on the absorption spectrum of the --- from the photosynthetic bacterium Chloropseudomonas ethylicum (Ghosh, Olson) (162) 135
- Bacteriochlorophyll P870
  - Role of --- in bacterial photosynthesis (Parson) (153) 248
- Bacterium paracoli
  - Translational characteristics of ribosomes and coding properties of transfer RNA in the mutant of --- with the increased GC content of DNA (Gause, Grünberger) (166) 538
- Barium ion
  - Stimulative and protective action of Sr^{2+} and --- on (Na^{+}-K^{+})-ATPase from cultured heart cells (Henn, Sperelakis) (163) 415
- Base complementarity
  - --- between rapidly labelled RNA in Escherichia coli B infected with ultraviolet-irradiated T2 phages and T2-DNA (Yamada, Nozu) (169) 67
- Base stacking
  - Nuclear magnetic resonance study of thermal effects upon --- in oligonucleotides: ApA > p (Hruska, Danyluk) (157) 238
- Basidiomycetes
  - Alcohol oxidase, a flavoprotein from several --- species. Crystallization by fractional precipitation with polyethylene glycol (Janssen, Ruelius) (151) 330
- Beating-heart cells
  - In vitro studies of --- in culture. XI. The ATP level and contractions of the heart cells (Seraydarian, Harary, Sato) (162) 414
- Benzene ring
  - Hydroxymethylation of the ---. IV. p-Hydroxymethyl-L-phenylalanine, a naturally occurring amino acid in Escherichia coli: Identification and biochemical properties (Sloane, Smith) (158) 394
- p-Benzosemiquinone
  - Complex formation between --- and imidazole and its derivatives (Leterrier, Balny, Douzou) (154) 444
- Benzoylated DEAE-cellulose
  - Fractionation of Escherichia coli transfer RNA on --- (Roy, Söll) (161) 572
- Betaine aldehyde dehydrogenase

---. Assay and partial purification (Goldberg, McCaman)(167) 186

Bile acids
--- and lipid metabolism. III. Influence of bile acids on phospholipids in liver and bile of the isolated perfused dog liver (Swell, Cooper Bell Jr., Entenman)(164) 278

Bile salt
Absorption of --- and fatty acid by hamster small intestine (Gordon, Kern Jr.)(152) 372

Bile salts
Role of Ca^{2+} during the hydrolysis of insoluble triglycerides by pancreatic lipase in --- (Benzonana)(151) 137

Bile salts
Studies on the adsorption of --- to non-absorbed components of diet (Eastwood, Hamilton)(152) 165

Bile salts
Studies on the quantitative distribution of --- along the rat small intestine under varying dietary regimes (Boyd, Eastwood) (152) 159

Biliary tree
Electrical potential differences in the --- (London, Diamond, Brooks)(150) 509

Bimolecular lipid membranes
Studies on a material which induces electrical excitability in ---. I. Production, isolation, gross identification and assay (Kushnir)(150) 285

Biosynthesis of ether-containing phospholipids
--- in the slug, Arion ater. III. Origin of the vinylic ether bond of plasmalogens (Thompson Jr.)(152) 409

Biosynthesis of haemoglobin
Action of histones of various origins on the acellular --- and on reticulocyte RNA (Kruh, Labie)(161) 518

Biosynthesis of RNA
Fractionation and --- of the rat adrenals (Boyadjiev, Hadjiolov)(161) 341

Biotin
Interrelationships between folic acid and ---: Effect of biotin on the biosynthesis of folate coenzymes (Pasquali, Landi, Marchetti)(165) 561

Blaberus discoidalis
Identification of 3-hydroxy-4-O-β-D-glucosidobenzyl alcohol in the left colleterial gland of --- (Pau, Acheson)(158) 206

Bladder
Differences in the physiological characteristics of toad --- from different geographical sources (Davies, Martin, Sharp) (150) 315

Blastocyst development
Uteroglobin: A hormone-sensitive endometrial protein involved in --- (Beier) (160) 289

Blastokinin
Composition of --- from rabbit uterus (Krishnan, Daniel Jr.)(168) 579

Blood cells
Incorporation of $[1\text{-}^{14}C]$ palmitate into the lipids of bovine --- (Winterbourn, Batt) (152) 255

Blood group O(H)-secretors
Isolation and characterization of a urinary oligosaccharide characteristic of --- (Lundblad)(165) 202

Blood group substances
Studies on ---. I. Purification of active material from hog gastric mucin by specific precipitation with Vicia cracca phytohaemagglutinin (Kristiansen, Porath)(158) 351

Bombyx mori
Purification and properties of sugar-nonspecific nuclease in pupa of silkworm, --- Linné (Himeno et al.)(167) 575

Bone
Ionic interaction with --- mineral. IV. Varying affinity of synthetic calcium phosphates for Ca^{2+} (Pak, Skinner)(165) 274

Bone cells
Entry of sugars into ---. Independence from parathyroid extract and thyrocalcitonin effects (Dos Reis, Rosenbusch, Nichols Jr.) (150) 311

Bone marrow
Inhibition of haem and globin synthesis by cobalt in rabbit reticulocytes and --- (Schulman, Jobe)(169) 241

Bone mineral
Reactions of H^+ and Zn^{2+} with the surfaces of bone and --- (Samachson, Schmitz) (170) 409

Bovine serum albumin, see albumin

Brain
Isolation of a membrane fraction enriched in nerve-end membranes from rat --- by zonal centrifugation (Cotman, Mahler, Anderson)(163) 272

Bromelain glycopeptide
Purification of β-xylosidase and its action on O-β-xylosyl L-serine and stem --- (Fukuda et al.)(159) 215

2-Bromo-2-phenylacetaldehyde
Inhibition of yeast alcohol dehydrogenase by --- (Tipton)(151) 692

5-Bromouracil
Efficiency of utilization of thymine and --- for normal and repair DNA synthesis in bacteria (Kanner, Hanawalt)(157) 532

5-Bromouracil-substituted DNA
Search for a mechanism for the increased sensitivity of --- to ultraviolet radiation (Lion)(155) 505

Buoyant density
--- of tobacco and spinach chloroplast DNA (Whitfeld, Spencer)(157) 333

γ-Butyrobetaine
α-Ketoglutarate and hydroxylation of --- (Lindstedt et al.)(158) 503

C

- Cadaverine
  - Differential effects of putrescine, --- and glyoxal-bis (guanylhydrazone) on DNA- and nucleohistone-supported DNA synthesis(Schwimmer)(166) 251
- Caffeic acid
  - Mechanism of oxidative gelation of a glycoprotein from wheat flour: Evidence from a model system based upon --- (Painter, Neukom)(158) 363
- Caffeine
  - Nuclear magnetic resonance studies of complexes between --- and aromatic donors(Hanna, Sandoval)(155) 433
- Calcium
  - Binding of --- with DNA and DNA-protein complexes(Chang, Carr)(157) 127
- Calcium
  - Sodium-dependent uptake of --- by crab nerve(Baker, Blaustein)(150) 167
- Calcium accumulation
  - Nucleotide content, ---, and phosphate metabolism in subcellular fractions of rat brain(Abood et al.)(153) 531
- Calcium adsorption
  - Differential effect of sodium and potassium on --- to stearic acid monolayers (Yamauchi et al.)(150) 181
- Calcium binding
  - Continuous recording of pH and pCa during --- by muscle microsomes (Johnson, Pressman)(153) 500
- Calcium-binding protein
  - Oestrogen-induced --- in Xenopus laevis (Munday et al.)(166) 748
- Calcium effects
  - --- in the electrical excitability of "split" frog skin(Fishman, Macey)(150) 482
- Calcium efflux
  - Stimulation of --- from smooth muscle by extracellular Ca^{2+} (Van Breemen, Van Breemen)(163) 114
- Calcium exchange
  - --- in plasma of the fowl(Hurwitz)(156) 389
- Calcium outflow
  - Effect of temperature and metabolic inhibitors on --- from squid giant axons (Rojas, Hidalgo)(163) 550
- Calcium phosphates
  - Ionic interaction with bone mineral. IV. Varying affinity of synthetic --- for Ca^{2+} (Pak, Skinner)(165) 274
- Calcium transport
  - Phosphorus metabolism during --- (Neville, Holdsworth)(163) 362
- Calcium-transport ATPase
  - Molecular size of the --- of sarcotubular vesicles estimated from radiation inactivation (Vegh et al.)(163) 266
- Canavanine
  - Studies on --- and its derivatives (Rickert, Viswanatha)(170) 123
- Carbamyl phosphate
  - Actinomycin D inhibition of thyroxine-induced synthesis of --- (Kim, Cohen)(166) 574
- Carbanion
  - Formation of an enzyme-bound β- --- in the enzymic conversion of L-homoserine to α-ketobutyrate (Krongelb, Smith, Abeles) (167) 473
- Carbodiimide
  - Reaction of tyrosine residues in proteins with --- reagents (Carraway, Koshland Jr.) (160) 272
- Carbohydrates
  - Distribution of sialic acids and other --- in skin of intact and hypophysectomized rats (Herp, Pigman)(165) 76
- Carbohydrate
  - Protein- --- interaction. XX. On the number of combining sites on concanavalin A, the phytohaemagglutinin of the jack bean (So, Goldstein)(165) 398
- Carbohydrate
  - Variations in the --- content of rabbit γG-globulin (Blacklow, Marshall)(165) 179
- Carbohydrate metabolism
  - Pituitary peptides with direct action on the --- and fatty acid metabolism (Bornstein et al.)(156) 31
- Carbohydrate oxidase
  - ---, a novel enzyme from Polyporus obtusus. I. Isolation and purification (Ruelius, Kerwin, Janssen)(167) 493
- Carbohydrate oxidase
  - ---, a novel oxidase from Polyporus obtusus. II. Specificity and characterization of reaction products(Janssen, Ruelius)(167) 501
- Carbohydrate-protein linkage
  - --- region of chondroitin 6-sulphate (Helting, Rodén)(170) 301
- Carbohydrate transport
  - Changes in the phosphatide pattern of yeast cells in relation to active --- (Deierkauf, Booij)(150) 214
- Carbon dioxide
  - Role of potassium in the uptake of --- by Micrococcus sodonensis(Perry)(165) 538
- Carbonic anhydrase
  - Effect of angiotensin on renal --- (Healy, Douglas)(151) 520
- Carbonic anhydrases
  - Immunologic and kinetic properties of --- from various tissues (Wistrand, Rao) (154) 130
- Carbonic anhydrase
  - Intracellular distribution and role of --- in the avian (Gallus domesticus) shell gland mucosa(Bernstein et al.)(159) 367
- Carbonic anhydrase
  - Zinc effect on physical properties of bovine --- (Brewer, Spencer, Ashworth)(168) 359
- Carbonic anhydrase B
  - Dehydration kinetics of human erythrocytic --- and C(Magid)(151) 236
- Carbonic anhydrase B
  - Inhibition by chelating agents of bovine erythrocyte --- at pH 7.4(Carpy)(151) 245
- Carbonic anhydrase C
  - Dehydration kinetics of human erythrocytic carbonic anhydrases B and --- (Magid) (151) 236
- Carbon - limited continuous culture
  - Studies on the ribosomes and RNA's of Aerobacter aerogenes grown at different rates in --- (Sykes, Young)(169) 103

Carbon-phosphorus bond
  Biosynthesis of the --- in Tetrahymena (Liang, Rosenberg)(156) 437
Carboxydismutase
  Effect of Mg^{2+} concentration on the pH optimum and Michaelis constants of the spinach chloroplast ribulosediphosphate carboxylase (---) (Bassham, Sharp, Morris) (153) 898
3-(3-Carboxy-4-hydroxyphenyl) alanine
  m-Carboxy-substituted aromatic amino acids in plant metabolism. IV. Transformation of 3-(3-carboxyphenyl) alanine into --- in Reseda lutea L. and Reseda odorata L. (Larsen, Sørensen)(156) 190
Carboxylation
  Photosynthesis by isolated chloroplasts. III. Light activation of the --- reaction (Jensen, Bassham) (153) 227
Carboxylesterases
  Purification and substrate and inhibitor specificities of --- of the pea (Pisum sativum L.) (Montgomery, Norgaard and Veerabhadrappa)(167) 567
Carboxylesterases
  System: Hydroxylamine–oxygen–cupric ion. A model hydroxylase in the inactivation of ox and pig liver --- (Runnegar et al.) (167) 632
S-(Carboxymethylthio)cysteine
  S-(2-Hydroxy-2-carboxyethylthio) cysteine and --- in human urine (Ubuka et al.) (158) 493
Carboxypeptidase A
  Demonstration of two forms of human pancreatic --- (Hadorn, Silberberg) (151) 702
Carboxypeptidase A_γ
  Photochemical evidence for the participation of --- (Freude)(167) 485
Carboxypeptidase B
  Studies on the action of --- on polylysine (Jones, Miller)(159) 411
3-(3-Carboxyphenyl) alanine
  m-Carboxy-substituted aromatic amino acids in plant metabolism. IV. Transformation of --- into 3-(3-carboxy-4-hydroxyphenyl) alanine in Reseda lutea L. and Reseda odorata L. (Larsen, Sørensen)(156) 190
Carcinogens
  Interaction of --- with histones in vitro (Sluyser)(154) 606
Cardiotonic steroids
  Action of --- on sugar transport in muscle, in vitro (Bihler)(163) 401
Cardiotonic steroids
  Comparison of intestinal penetration of cortisol and convallatoxin: Demonstration of a transport mechanism for --- (Lauterbach)(150) 146
Carnitine
  --- and carnitine palmityltransferase in Euglena growing with palmitate as a sole carbon source (Wittels, Blum)(152) 220
L-Carnitine
  Effects of --- on utilization of ketone bodies and glucose in eviscerated rats and in nephrectomized rats (Söling, Appels) (158) 162
Carnitine palmityltransferase
  Carnitine and --- in Euglena growing with palmitate as a sole carbon source (Wittels, Blum)(152) 220
Carotenoids
  Biosynthesis of cyclic --- in Rhodotorula mucilaginosa and Rhodotorula aurantiaca (Bonaly, Malenge)(164) 306
Carotenoid
  Quantitative thin-layer chromatography of chlorophyll and --- from marine algae (Jeffrey)(162) 271
Carotenoid complex
  Optical properties of a --- derived from Rhodospirillum rubrum (Ke et al.)(162) 467
Cartilage
  Protein-polysaccharide complex of bovine nasal ---. Studies on the molecular organisation (Serafini-Fracassini)(170) 289
Casein
  Inhibition of --- turn-over by hydrocortisone during mammary gland differentiation in vitro (Turkington)(158) 274
Casein
  Simultaneous determination of α_{S1}-, β-and κ-caseins in whole --- by using carboxypeptidase A (Dumas)(168) 274
α_{S1}-Casein
  Studies on the associating subunit of --- (Schmidt, Van Markwijk)(154) 613
κ-Casein
  Tryptic peptide with the rennin-sensitive linkage of cow's --- (Jollès, Alais, Jollès) (168) 591
Catabolite repression
  --- of the synthesis of β-galactosidase in Proteus mirabilis F-lac (Colby Jr., Martin, Hu)(157) 159
Catalase
  Improved preparative method for spinach --- and evaluation of some of its properties (Gregory)(159) 429
Catalase
  Native form of beef liver --- (Heidrich, Hannig)(168) 380
Catalases
  Polarographic comparison of microbial --- in vivo (Brown)(165) 174
Catalase
  Regulation of nitrate reductase and --- by amino acids in Neurospora crassa (Subramanian, Padmanaban, Sarma)(151) 20
Catalase complexes
  Electron spin resonance studies of --- (Rein et al.)(167) 538
Catecholamine
  Amylase secretion in rat parotid slices by apparent activation of endogenous --- (Schramm)(165) 546
Catecholamines
  Regulation of glycogen metabolism in liver by the autonomic nervous system. III. Differential effects of sympathetic-nerve stimulation and of --- on liver phosphorylase (Shimazu, Amakawa)(165) 349
Cation binding
  Specificity effects of --- to the macroion in the bovine serum albumin, histamine interaction (Botré, Marchetti, Borghe)(154) 360
Cation binding
  --- to submitochondrial particles (Scarpa, Azzi)(150) 473
Cation movement
  Biochemical aspects of the visual process. III. Specificity of the retinaldehyde effect on --- in rod outer segments (Daemen, Bonting)(163) 212
Cation requirement
  Factors affecting the --- of a halophilic NADH dehydrogenase (Hochstein, Dalton) (167) 638

Cation transport
Interaction of K⁺, ouabain and Na⁺ on the --- and respiration of renal cortical cells of hamsters and ground squirrels (Willis) (163) 516

Cation transport
Relationship between the transport of glucose and --- across cell membranes in isolated tissues. III. Effect of Na⁺ and hyperosmolarity on glucose metabolism and insulin responsiveness in isolated rat hemidiaphragm (Clausen)(150) 56

Cation transport
Relationship between the glucose transport and --- across cell membranes in isolated tissues. IV. The "insulin-like" effect of Li⁺ (Clausen)(150) 66

Cells
Elastic-mathematical theory of --- and mitochondria in swelling process. V. Transformation of cortical granule membrane of egg cell of Strongylocentrotus purpuratus in subelastic and elastic swelling (Mela) (150) 541

Cells
Elastic-mathematical theory of --- and mitochondria in swelling process. VI. Ultrastructure of membrane region in the egg cell of the sea urchin (Strongylocentrotus purpuratus) in subelastic and elastic swelling (Mela)(150) 553

Cell concentration
Interaction between cells. I. Influence of --- on amino acid transport and protein synthesis (Bladé, Harel)(156) 148

Cell concentration
Interaction between cells. II. Dependence of amino acid active transport on the --- (Bladé, Blat, Harel)(156) 157

Cell-free bacterial system
Chain initiation during polypeptide synthesis in a --- programmed with plant viral messengers. I. Dependence on formylation and ribosomal factors (Reinecke et al.) (157) 566

Cell-free bacterial systems
Chain initiation during polypeptide synthesis in --- programmed with plant viral messengers. II. The role of N-formylmethionine (Hoogendam et al.)(157) 579

Cell-free enzyme system
Biosynthesis of tyrocidine by a --- of Bacillus brevis ATCC 8185. I. Preparation of partially purified enzyme system and its properties (Fujikawa, Suzuki, Kurahashi) (161) 232

Cell-free enzyme system
Tyrocidine biosynthesis by a --- of Bacillus brevis ATCC 8185. II. Amino acid substitution in tyrocidine (Fujikawa et al.)(169) 520

Cell-free system
Effect of heavy water on the --- (Holland, Antoni)(157) 663

Cell-free system
Incorporation of amino acids by a --- prepared from human cells cultured in vitro (Perani et al.)(161) 223

Cell-free system
Studies on human platelets. I. Synthesis of platelet protein in a --- (Booyse, Rafelson Jr.)(156) 689

Cell-free system
Study of phenylalanine incorporation into proteins in a --- from chicken liver as a function of age (Beck et al.)(169) 248

Cell membranes
Effects of ATP and Na⁺ on a K⁺-activated phosphatase from erythrocyte --- (Rega, Garrahan, Pouchan)(150) 742

Cell membranes
Effects of electron microscopic fixatives on --- of the perfused rat heart (Krames, Page)(150) 24

Cell membrane
Relationship between the transport of glucose and cations across --- in isolated tissues. III. Effect of Na⁺ and hyperosmolarity on glucose metabolism and insulin responsiveness in isolated rat hemidiaphragm (Clausen)(150) 56

Cell partition
Partition of DEAE-dextran in aqueous dextran-polyethylene glycol phases and its effect on the --- in such systems (Walter, Garza, Coyle)(156) 409

Cell walls
Linkages in the --- of Rhodospirillum rubrum and its bacilliform mutants (Newton) (165) 534

Cell walls
Polyuronides in the --- of Mucor rouxii (Bartnicki-Garcia, Reyes)(170) 54

Cell walls
Ribonuclease activity associated with mammalian --- (Stonehill, Huppert) (155) 353

Cellulase
--- of marine mollusc Littorina sp. (Elyakova, Sova, Vaskovsky (167) 462

Ceramides
Gas-liquid chromatographic separation of --- as di-O-trimethylsilyl ether derivatives (Samuelsson, Samuelsson)(164) 421

Ceramide
Specificity of the enzymatic synthesis of --- (Fujino, Ito)(152) 627

Ceramide dihexoside sulphate
Structure of kidney --- (Stoffyn, Stoffyn, Mårtensson)(152) 353

Cerebrosides
Carbohydrate moiety of rat mucosal (Yurkowski, Walker)(158) 299

Cerebroside galactosidase
Properties of --- (Bowen, Radin)(152) 599

Cerebroside galactosidase
Purification of --- from rat brain (Bowen, Radin)(152) 587

Cerebroside 3-sulphate
--- as a physiological substrate of arylsulphatase A (Mehl, Jatzkewitz)(151) 619

Ceruloplasmin
Conformational changes of porcine --- with denaturing reagents (Hibino et al.) (168) 472

Ceruloplasmin
Relationships between the copper atoms of ---. III. A difference in the reactivity of the chromophoric sites (Marriott, Perkins) (154) 501

Ceruloplasmin
Reversible dissociation of porcine --- into subunits (Mukasa, Nosoh, Sato)(168) 483

Ceruloplasmin
Role of iron in the oxidase activity of --- (McDermott et al.)(151) 541

Ceruloplasmin
Subunit structure of porcine --- (Mukasa et al.)(168) 132

Chamaepeuce afra
Penta-acid triglyderides of --- seed oil (Mi-

kolajczak, Smith)(152) 244

Charge-transfer
--- interpretation of the interactions of haemoglobin with oxygen and carbon monoxide(Politzer)(153) 799

Chironomus
System in vitro for the synthesis of RNA and protein by isolated salivary glands and by nuclei from --- larvae (Ristow, Arends) (157) 178

Chlamydomonas reinhardtii
Protein turnover and macromolecular synthesis during growth and gametic differentiation in --- (Jones, Kates, Keller) (157) 589

Chloramphenicol
Cross resistance of Escherichia coli B ribosomes to inhibition of the puromycin reaction by erythromycin, spiramycin and --- (Černá, Rychlik)(157) 436

Chloramphenicol
Effect of low concentrations of --- on beating rat-heart cells in tissue culture (Kroon, Jansen)(155) 629

Chloramphenicol
Effect of --- on the polysome formation of starved stringent Escherichia coli (Cameron, Julian)(169) 373

Chloramphenicol
Increase of uridine kinase activity in Escherichia coli B following phage T_2 infection or --- treatment (Pravdina, Galegov) (166) 279

Chloramphenicol
Influence of --- on thymineless death in bacteria (Ganguli, Bhattacharjee)(169) 545

Chloramphenicol
Non-identity of the site of action of erythromycin A and --- on Bacillus subtilis ribosomes (Oleinick, Wilhelm, Corcoran) (155) 290

Chloramphenicol
Temperature sensitivity of the weak bonds by which --- is held in intact cells (Hurwitz, Braun)(157) 392

Chlorella
Effect of 2,4-dinitrophenol and other uncoupling agents on the nitrate assimilation and nitrite assimilation by --- (Ahmed, Morris)(162) 32

Chlorella
Interactions between photosynthesis and respiration in ---. I. Types of transients of oxygen exchange after short light exposures (Ried)(153) 653

Chlorella
Light-induced spectroscopic changes in the 600-mμ region in leaves of a higher plant and in --- (Fork, De Kouchkovsky) (153) 891

Chlorella
Nature of DNA-associated RNA in --- cells (Beiderbeck, Richter)(157) 658

Chlorella
Quantum requirement of photosynthesis in --- (Ng, Bassham)(162) 254

Chlorella pyrenoidosa
Action spectrum from nucleic acid formation in an achlorophyllous mutant of --- (Senger, Bishop)(157) 417

Chlorella pyrenoidosa
Comparison of the separate package and spill-over models of photosynthesis for the alga --- (Williams)(153) 484

Chlorella pyrenoidosa
Influx of potassium into --- (Barber) (163) 141

Chlorella pyrenoidosa
Measurement of the membrane potential and evidence for active transport of ions in --- (Barber)(150) 618

Chlorella pyrenoidosa
Potassium efflux from --- (Barber)(163) 531

Chlorella pyrenoidosa
Sodium efflux from --- (Barber)(150) 730

Chlorella pyrenoidosa
Sulphate transport system of --- and its regulation. I. Permeation kinetics (Vallée, Jeanjean)(150) 599

Chlorella pyrenoidosa
Sulphate transport system of --- and its regulation. II. The regulation of entry (Vallée, Jeanjean)(150) 607

Chlorella vannielii
Laser as a light source for the photosynthesis and growth of --- (Karlander, Krauss) (153) 312

Chloride exchange
Compartmentation and --- in carrot root tissue (Cram)(163) 339

Chloride flux
Effect of inhibitors of hydrochloric acid secretion on the unidirectional --- across bullfrog gastric mucosa (Forte)(150) 136

Chloroacetic acid
Rate-limiting reaction in papain action as derived from the reaction of the enzyme with --- (Sluyterman)(151) 178

Chlorobium thiosulfatophilum
Cytochromes of --- (Meyer et al.)(153) 854

Chlorophyll
--- absorption and fluorescence in Ochromonas danica (Brown)(153) 901

Chlorophyll
--- fluorescence near 720 mμ in Euglena extracts (Brown, Michel-Wolwertz)(153) 288

Chlorophyll
Fluorescence excitation of --- in green plants by β particles (Pearlstein)(153) 504

Chlorophyll
--- fluorescence in photosynthetic systems. IV. Induction of various emissions at low temperatures (Murata)(162) 106

Chlorophyll
Quantitative thin-layer chromatography of --- and carotenoid from marine algae (Jeffrey)(162) 271

Chlorophyll
Relative stability of --- complexes in vivo (Thomas, Nijhuis)(153) 868

Chlorophyll a
Absorption difference spectroscopy of --- in ethanol solution (Broyde, Brody, Brody) (153) 183

Chlorophyll a
--- interactions with chloroplast lipids in vitro (Trosper, Sauer)(162) 97

Chlorophyll a
Optical and photochemical properties of --- solubilized in aqueous solutions of surfactants (Massini, Voorn)(153) 589

Chlorophyll a
Oxidation of --- in alcohols (Diehn, Seely) (153) 862

Chlorophyll a
Reversible photoreduction of --- to a compound, $Ch_a H_2 610$, with an absorption maximum at 610 nm (Hendrich)(162) 265

Chlorophyll b
Studies on a barley mutant lacking ---. II.

  Fluorescence properties of isolated chloroplasts(Boardman, Thorne)(153) 448
Chlorophyll fluorescence
  Parallel time courses of oxygen evolution and --- (Bannister, Rice)(162) 555
Chlorophyll pigments
  Resolution of --- in photosystems 1 and 2 of spinach chloroplasts by low-temperature derivative spectroscopy (Cramer, Butler) (153) 889
Chloroplasts
  Analysis of the interactions between the two photosystems in isolated --- (Joliot, Joliot, Kok)(153) 635
Chloroplasts
  Analysis of light-induced proton uptake in isolated --- (Karlish, Avron)(153) 878
Chloroplasts
  Analysis of the "weak light effect" on the fluorescence yield in isolated chloroplasts (Malkin)(153) 188
Chloroplasts
  Chlorotri-n-butyltin. An inhibitor of photophosphorylation in isolated --- (Kahn) (153) 203
Chloroplast
  --- and cytoplasmic polysomes and ribosomal RNA from wheat (Mehta, Hadziyev, Zalik)(169) 381
Chloroplast
  Effect of Mg^{2+} concentration on the pH optimum and Michaelis constants of the spinach --- ribulosediphosphate carboxylase (carboxydismutase)(Bassham, Sharp, Morris)(153) 898
Chloroplasts
  Electrolyte exchange in isolated spinach --- (Winocur, Macey, Tolberg)(150) 32
Chloroplast
  Enzymatic nitrate reduction with flavin nucleotides reduced by a new --- NADH-specific diaphorase (Paneque et al.) (162) 149
Chloroplasts
  Fluorescence properties of manganese-deficient spinach --- (Anderson, Thorne) (162) 122
Chloroplasts
  Fluorescence properties of --- from manganese deficient and mutant tobacco (Homann)(162) 545
Chloroplasts
  Isolation of --- free from nuclear DNA contamination (Kung, Williams)(169) 265
Chloroplasts
  Kinetic studies on electron-transport components in isolated ---. I. The effect of the pool of electron carriers between the two photosystems on P_{700} changes (Malkin) (162) 392
Chloroplasts
  Laser-induced kinetics of cytochrome oxidation and the 518 mμ absorption change in spinach leaves and --- (Hildreth) (153) 197
Chloroplasts
  Light-absorption and light-scattering changes during shrinking and swelling of --- (Yamashita, Itoh, Shibata)(162) 610
Chloroplasts
  Light-triggered, thiol-dependent ADP–ATP exchange activity in spinach --- (Stewart, Rienits)(153) 907
Chloroplasts
  Measurements of s-ρ coordinates during the development of Euglena --- (Knight, Price)(158) 283
Chloroplasts
  Nature of haem moiety and oxidation–reduction potential of cytochrome 558 in Euglena --- (Ikegami, Katoh, Takamiya) (162) 604
Chloroplasts
  Paraquat in --- (Baldwin, Clarke, Wilson) (162) 614
Chloroplasts
  Photosynthesis by isolated ---. I. Diffusion of labelled photosynthetic intermediates between isolated chloroplasts and suspending medium (Bassham, Kirk, Jensen) (153) 211
Chloroplasts
  Photosynthesis by isolated ---. II. Effects of addition of cofactors and intermediate compounds (Jensen, Bassham)(153) 219
Chloroplasts
  Photosynthesis by isolated ---. III. Light activation of the carboxylation reaction (Jensen, Bassham)(153) 227
Chloroplasts
  Polarographic method for detection of oxygen production and reduction of Hill reagent by isolated --- (Joliot, Joliot)(153) 625
Chloroplast
  --- reactions of photosynthetic mutants of Scenedesmus obliquus (Pratt, Bishop) (153) 664
Chloroplasts
  Relationship of hydrogen ion transport to photophosphorylation in spinach --- (Dilley, Shavit)(162) 86
Chloroplasts
  Resolution of chlorophyll pigments in photosystems 1 and 2 of spinach --- by low-temperature derivative spectroscopy (Cramer, Butler)(153) 889
Chloroplasts
  Site of action of plastocyanin in --- treated with detergent (Hind)(153) 235
Chloroplast
  Stabilization of --- function (Wasserman, Fleischer)(153) 154
Chloroplasts
  Stoichiometric relation of phosphorylation to electron transport in isolated --- (Izawa, Good)(162) 380
Chloroplasts
  Studies on a barley mutant lacking chlorophyll b. II. Fluorescence properties of isolated --- (Boardman, Thorne)(153) 448
Chloroplast fructose-1,6-diphosphatase
  Inhibition of spinach --- by MgATP^{2-}, MgADP^{-}, and magnesium pyrophosphate (MgP$_2$O$_7^{2-}$)(Morris)(162) 462
Chloroplast grana
  Membranifibrils in mitochondrial cristae and --- (Stiles, Wilson, Crane)(162) 631
Chloroplast lamellar membrane
  Association of lipids and proteins in --- (Ji, Benson)(150) 686
Chloroplast lamellar protein
  Studies on chloroplast membrane structure. I. Association of pigments with --- (Ji, Hess, Benson)(150) 676
Chloroplast lipids
  Chlorophyll a interactions with --- in vitro (Trosper, Sauer)(162) 97
Chloroplast membrane
  Studies on --- structure. I. Association of pigments with chloroplast lamellar protein

(Ji, Hess, Benson)(150) 676
Chloroplast pigments
Properties of black lipid membranes of --- (Ting et al.)(163) 439
Chloroplasts shrinkage
--- and increased photophosphorylation in vitro upon illuminating intact plants of Pisum sativum (Nobel)(153) 170
Chloropseudomonas ethylicum
Effects of denaturants on the absorption spectrum of the bacteriochlorophyll–protein from the photosynthetic bacterium --- (Ghosh, Olson)(162) 135
Chloroquine binding
Comparison of --- to DNA, and polyadenylic and polyguanylic acids (Blodgett, Yielding)(169) 451
Chlorotri-n-butyltin
---. Inhibitor of photophosphorylation in isolated chloroplasts (Kahn)(153) 203
5β-Cholestane-3α, 7α, 12α-triol
Oxidation of --- by rat liver mitochondria (Okuda, Hoshita)(164) 381
Cholesterol
Androgen biosynthesis. I. Enzymatic cleavage of the --- side-chain to dehydroepiandrosterone and 2-methylheptan-6-one (Jungmann)(164) 110
Cholesterol
Effects of temperature and --- on the glucose permeability of liposomes prepared with natural and synthetic lecithins (Demel et al.)(150) 655
Cholesterol
Fate of molecular oxygen required by endocrine enzymes for the side-chain cleavage of --- (Takemoto et al.)(152) 749
Cholesterol
Studies on the equilibration of radioisotopic --- with human serum lipoprotein cholesterol in vitro (Rose)(152) 728
Cholesterol
Studies on lecithin- --- -water interations by differential scanning calorimetry and X-ray diffraction (Ladbrooke, Williams, Chapman)(150) 333
Cholesterol
Turnover, by synthesis and by transfer, of free and esterified ---. Magnitude of these compartments in adult rats and their distribution in tissues (Chevallier, Hollander, Simonnet)(164) 339
Chloresterol biosynthesis
Hepatic endoplasmic reticulum and --- (Pascaud, Auliac, Pascaud)(150) 326
Cholesterol biosynthesis
Studies on estrogen regulation of --- in rat liver microsomes (Mukherjee, Bhose) (164) 357
Cholesterol esters
Hydrolysis of synthetic --- containing trans fatty acids (Sgoutas)(164) 317
Cholesterol incorporation
Effect of --- on the sensitivity of liposomes to the polyene antibiotic, filipin (Kinsky et al.)(152) 174
Cholesterol synthesis
Noradrenalin-induced increase in hepatic --- and its blockade by puromycin (Bortz) (152) 619
Cholesterol uptake
Factors modifying --- by intestinal rings (Feldman)(150) 727
Cholesterol uptake
--- by L5178Y tissue culture cells: Studies with delipidized serum (Rothblat, Buchko, Kritchevsky)(164) 327
Choline
Specificity for incorporation of --- and ethanolamine into rat liver microsomal lecithins (Rytter, Miller, Cornatzer)(152) 418
Choline
Use of radioactive --- as a label for microsomal membranes. I. Selectivity of label for endoplasmic reticulum and specificity for lecithin (Nagley, Hallinan)(163) 218
[Me-^{3}H]Choline
Incorporation of L-[Me-^{14}C]methionine and --- into lung phosphatides (Spitzer, Morrison, Norman)(152) 552
Choline acetyltransferase
Motor nerve and the activity of --- in the skeletal muscle (Tuček)(170) 457
Choline glycerophosphatide
Mono- and dimethyl phosphatidates from different subtypes of --- and ethanolamine glycerophosphatide (Renkonen)(152) 114
Choline plasmalogen
Biosynthesis of --- by ox heart (Poulos, Hughes, Cumings)(152) 629
Cholinesterase
Molecular aspects of the interactions of halogeno-acetylcholines with --- (Rama Sastry, Chiou)(167) 339
Chondroitin 6-sulphate
Carbohydrate–protein linkage region of --- (Helting, Rodén)(170) 301
Chondroitin sulphate
Demonstration of an interaction between collagen and --- (Wasteson, Öbrink) (170) 201
Chondroitin sulphate
Distribution of sulphate groups in --- chains. Detection of "oversulphated" and "undersulphated" repeating periods (Mathews, Decker)(156) 419
Chondroitin sulphate
Properties of a protein-bound --- of pig aorta (Franek, Dunstone)(165) 555
Chorismate
Tyrosine biosynthesis in Aerobacter aerogenes: Evidence for a subunit structure of the protein converting -- into 4 hydroxyphenyl pyruvate (Cotton, Gibson)(160) 188
Chorismate mutase
Biosynthesis of phenylalanine and tyrosine in the pea (Pisum sativum): --- (Cotton, Gibson)(156) 187
Chromatin
Acceleration of senescence and of the increase of --- associated nucleases in excised barley leaves by abscisin II and its reversal by kinetin (Srivastava)(169) 534
Chromatin
Effect of cortisol on genetic transcription in rat-liver --- (Stackhouse, Chetsanga, Tan) (155) 159
Chromatin
Effect of salt extraction and heat denaturation on the behaviour of rat-liver --- (Samis Jr., Poccia, Wulff)(166) 410
Chromatin
Influence of ionic strength and a polyanion on transcription in vitro. II. Effects on the template efficiency of rat-liver --- for a purified bacterial RNA polymerase (Chambon et al.)(157) 520
Chromatin
Low molecular weight RNA of the --- fraction from Novikoff hepatoma and rat liver

nuclei (Prestayko, Busch)(169) 327

Chromatin RNA polymerase
Enhancement by 2,4-dichlorophenoxyacetic acid of --- in soybean hypocotyl tissue (O'Brien et al.)(169) 35

Chromatium D
Electron paramagnetic resonance studies on photosynthesis in bacteria. I. Properties of photo-induced EPR-signals of --- (Schleyer)(153) 427

Chromatium D
Evidence for three photochemical systems in --- (Morita)(153) 241

Chromatium
Ferredoxin-dependent NAD reduction with hydrogen gas by subcellular preparations from the photosynthetic bacterium, --- (Buchanan, Bachofen)(162) 607

Chromatium D
Light-induced electron transport in --- I. Isolation and characterization of Chromatium chromatophores (Cusanovich, Kamen)(153) 376

Chromatium D
Light-induced electron transport in --- II. Light-induced absorbance changes in Chromatium chromatophores (Cusanovich, Bartsch, Kamen)(153) 397

Chromatium D
Light-induced electron transfer in --- III. Photophosphorylation by Chromatium chromatophores (Cusanovich, Kamen)(153) 418

Chromatography
Use of DEAE-cellulose for the --- of high molecular weight RNA (Parish)(169) 14

Chromatography
Versatile lipophilic Sephadex derivative for "reversed-phase" --- (Ellingboe, Nyström, Sjövall)(152) 803

Chromatophores
Light-induced electron transport in Chromatium Strain D. I. Isolation and characterization of Chromatium --- (Cusanovich, Kamen)(153) 376

Chromatophores
Light-induced electron transport in Chromatium Strain D. II. Light-induced absorbance changes in Chromatium --- (Cusanovich, Bartsch, Kamen)(153) 397

Chromatophores
Light-induced electron transfer in Chromatium Strain D. III. Photophosphorylation by Chromatium --- (Cusanovich, Kamen)(153) 418

Chromatophores
Photochemical activities of $K_3Fe(CN)_6$-treated --- from Rhodospirillum rubrum (Beugeling)(153) 143

Chromatophores
Requirement of ubiquinone-10 for the ATP-forming system and ATPase system of --- from Rhodospirillum rubrum (Horio et al.)(153) 913

Chyle triglycerides
Metabolism of --- in liver. II. Distribution of radioactivity between subcellular components after the intravenous injection of glycerol- and fatty acid-labelled chyle into the carbohydrate-fed rat (Belfrage)(152) 266

Chylomicron triglycerides
Study of endogenous fatty acids of the lymphatic --- in the rat after administration of various mixed labelled triglycerides (Boucrot, Clément)(164) 558

Chymotrypsin
Binding of trypsin and --- by human intestinal mucosa (Goldberg, Campbell and Roy)(167) 613

Chymotrypsin
Biochemistry of rabbit α_1-macroglobulin. IV. Effect on the esterase activity of trypsin and -- (Berthillier, Got, Bertagnolio)(170) 140

α-Chymotrypsin
Convenient titrant for --- and trypsin (Knowles, Preston)(151) 220

α-Chymotrypsin
Prototropic equilibrium of the reaction of diisopropylphosphofluoridate with --- (Marini, Martin)(168) 73

α-Chymotrypsin
Reduction and reoxidation of turkey ovomucoid–a protein with dual and independent inhibitory activity against trypsin and --- (Sjöberg, Feeney)(168) 79

Chymotrypsin esterase
--- activity in the presence of oleic and taurocholic acid (Rogers, Bachorik)(159) 200

Chymotrypsinogen A
Heat denaturation of --- in the presence of polyanions (Hofstee, Bobb)(168) 564

Chymotrypsinogen–DNA complex
Interaction of actinomycin D with the --- (Bobb)(169) 457

Chymotrypsinogen–DNA complexes
Spectral properties of --- and the effects of heating (Bobb)(155) 566

Ciliary body
Studies on intraocular transport of taurine. I. Accumulation in rabbit --- -iris preparation in vitro (Reddy)(158) 246

[4-^{3}H]Cinnamic acid
Hydroxylation-induced migration and retention of tritium on conversion of --- to 4-hydroxycinnamic acid by an enzyme from pea seedlings (Russel et al.)(170) 210

Cinnamoyl imidazole
Reaction of tris(hydroxymethyl)aminomethane with --- and cinnamoyltrypsin (Oliver, Viswanatha)(156) 422

Cinnamoyltrypsin
Reaction of tris(hydroxymethyl)aminomethane with cinamoyl imidazole and --- (Oliver, Viswanatha)(156) 422

Circular dichroism
--- of Escherichia coli ribosomes and tobacco mosaic virus (Miall, Walker)(166) 711

Circular dichroism
--- of protonated DNA (Luck, Zimmer, Snatzke)(169) 548

Citrate synthase
Inhibition of --- by ATP (Jangaard, Unkeless, Atkinson)(151) 225

Citric acid
Interrelationships between liver composition, plasma glucose and ketones, and hepatic acetyl-CoA and --- during prolonged starvation in the male rat (Herrera, Freinkel)(170) 244

Citrulline
Mitochondrial --- synthesis with exogenous ATP (Graafmans, Charles, Tager)(152) 916

Clostridium botulinum
Cation-exchange chromatography of --- type A toxin on Amberlite IRC-50 resin at pH 5.55 (DasGupta, Boroff, Cheong)(168) 522

Clostridium botulinum

  - Purification and some properties of --- type-E toxin (Kitamura, Sakaguchi, Sakaguchi)(168) 207
- Clostridium histolyticum
  - Peptide substrates for a proteinase of --- (McQuade, Crewther)(167) 619
- Clostridium histolyticum
  - Pseudocollagenase: A proteinase from --- (Mitchell)(159) 554
- Clostridium pasteurianum
  - Control of pyruvate phosphoroclastic activity in extracts of --- by adenosine diphosphate and acetyl phosphate (Biggins, Dilworth)(156) 285
- Clostridium pasteurianum
  - N_2fixation by purified components of the N_2-fixing system of --- (Kennedy, Morris, Mortenson)(153) 777
- Clostridium perfringens
  - Activation by electrolytes and polylysine of poly A synthesis by --- polynucleotide phosphorylase (Fitt, Dietz Jr., Grunberg-Manago)(151) 99
- Clusters
  - Nucleotide --- in DNA. III. Separation of pyrimidine isostichs according to base composition (Černý, Mushynski, Spencer) (169) 439
- Coat proteins
  - Wild-type and defective --- of tobacco mosaic virus: Electrophoretic analysis of plant extracts in polyacrylamide gels (Sarkar, Jockusch)(160) 259
- Cobalt
  - Inhibition of haem and globin synthesis by --- in rabbit reticulocytes and bone marrow (Schulman, Jobe)(169) 241
- Cobalt ihibition
  - --- of iron-catalyzed hydrogen peroxide decomposition of riboflavin (Welkie) (158) 479
- Cobalt toxicity
  - Effect of nitrogen source on --- in Neurospora crassa (Subramanian, Sarma) (156) 199
- Cobra venom
  - Direct lytic factor of ---. Purification and chemical characterization (Aloof-Hirsch, De Vries, Berger)(154) 53
- Cobrotoxin
  - Optical rotatory dispersion and circular dichroism of --- (Yang et al.)(168) 373
- Coding
  - Fractionation of serine transfer RNA from Escherichia coli and their --- properties (Ishikura, Nishimura)(155) 72
- Coding
  - Synthesis and --- properties of 8-azaguanosine-containing triribonucleoside diphosphates (Grünberger, Holý, Šorm) (161) 147
- Coding
  - Translational characteristics of ribosomes and --- properties of transfer RNA in the mutant of Bacterium paracoli with the increased GC content of DNA (Gause, Grünberger)(166) 538
- Coding response
  - Modification of nucleosides and nucleotides. IX. Inactivation of --- of yeast transfer RNA containing inosine residue by cyanoethylation (Yoshida et al.)(166) 636
- Codon recognition
  - Modification of nucleosides and nucleotides. X. Evidence for the important role of inosine residue in --- of yeast alanine transfer RNA (Yoshida, Kaziro, Ukita) (166) 646
- Coezyme B_{12}
  - --- as hydrogen carrier in the ethanolamine deaminase reaction (Babior)(167) 456
- Coliphage T_7
  - Size, number and distribution of polyguanylic acid binding sites on the separated DNA strands of --- (Summers, Szybalski) (166) 371
- Collagen
  - Application of differential thermal analysis to the study of hydrothermal shrinkage in epimysial and corium --- (McClain et al.) (168) 143
- Collagen
  - Characterization of the large fragments from pepsin-digested, denatured --- (Pikkarainen et al.)(160) 90
- Collagen
  - Correlation between pronase susceptibility and hydroxyproline content of --- fiber (Fujimoto)(154) 183
- Collagen
  - Demonstration of an interaction between --- and chondroitin sulphate (Wasteson, Öbrink)(170) 201
- Collagen
  - Effect of age on the maturation of rat-skin --- (Heikkinen, Kulonen)(160) 464
- Collagen
  - Effect of lathyrogens on the rate of --- fibril formation and dissolution (Shimizu, Golub, Glimcher)(168) 356
- Collagens
  - Formol titration for the determination of ε-amino groups substituted in modified --- (Bowes, Cater)(168) 353
- Collagen
  - Fractionation of pepsin-digested, denatured --- (Lampiaho et al.)(160) 77
- Collagen
  - Glycoprotein structure: The carbohydrate of bovine cornell --- (Bosmann, Jackson) (170) 6
- Collagen
  - High-resolution acrylamide-gel electrophoresis technique for the analysis of --- polymer components (Clark, Veis)(154) 175
- Collagen
  - Human skin collagenase. Isolation and mechanism of attack on the --- molecule (Eisen, Jeffrey, Gross)(151) 637
- Collagen
  - Hydroxyprolinemia. III. The origin of free hydroxyproline in hydroxyprolinemia. --- turnover. Evidence for a biosynthetic pathway in man (Efron et al.)(165) 238
- Collagen
  - Independence of --- hydroxylation on the conformational state of the precursor substrate (Nordwig, Pfab)(154) 603
- Collagen
  - Infrared spectrum of acid-soluble --- (Huc, Sanejouand)(154) 408
- Collagen
  - Interaction of aldehydes with --- (Bowes, Cater)(168) 341
- Collagen
  - Intermediate labile intermolecular cross-links in --- fibres (Bailey)(160) 447
- Collagens
  - Isolation and amino acid composition of bovine corneal polymeric --- (Freeman, Ste-

ven, Jackson)(154) 252
Collagens
Isolation of --- of high hydroxyproline, hydroxylysine and carbohydrate content from muscle layer of Ascaris lumbricoides and pig kidney (Fujimoto)(168) 537
Collagen
Isolation and localization of a peptide fragment from --- treated with hydroxylamine (Volpin, Hörmann, Kühn)(168) 389
Collagen
Physical chemical studies on the age change in rat tail tendon --- (Butzow, Eichhorn) (154) 208
Collagen
Precipitation of --- in the segmented long-spacing form by various organic and inorganic compounds (Bowden, Chapman, Wynn)(154) 190
Collagen
Proteins of the human intervertebral disc. The association --- with a protein fraction having an unusual amino acid composition (Steven, Jackson, Broady)(160) 435
Collagen
Quantitative system for the study of --- and hyaluronic acid synthesis in vitro (Wiener et al.)(166) 229
Collagen
Role of glutamic acid as a precursor of --- proline and hydroxyproline (Ishibashi, Ide, Tsurufuji)(165) 296
Collagen
Soluble --- with high aldehyde content extracted from insoluble collagen with mercaptoethylamine (Deshmukh, Nimni) (154) 258
Collagen
Studies on --- cross-linking in vivo (Shoshan, Finkelstein)(154) 261
Collagen
Thermal stability of acid-soluble --- in water–organic solvent mixtures (Herbage, Hanus, Vallet)(168) 544
Collagenase
Extracellular --- produced by Streptomyces madurae (Rippon)(159) 147
Collagenase
Human skin ---. Isolation and mechanism of attack on the collagen molecule (Eisen, Jeffrey, Gross)(151) 637
Complementation
--- in vitro between cysteine auxotrophs of Salmonella typhimurium (Henderson, Loughlin)(156) 195
Concanavalin A
Interaction of --- with methyl α-D-glucopyranoside (Yariv, Kalb, Levitzki)(165) 303
Concanavalin A
Molecular weight of --- (Kalb, Lustig) (168) 366
Concanavalin A
Protein–carbohydrate interaction. XX. On the number of combining sites on ---, the phytohaemagglutinin of the jack bean (So, Goldstein)(165) 398
Conductivity
Influence of --- on the electrophoretic mobility of erythrocytes (Carstensen et al.) (156) 394
Connective tissues
Mechanism of action of thiols on the mechanical properties of --- (Harkness, Harkness)(154) 553
Connective tissue
New class of structural proteins from --- (Timpl, Wolff, Weiser)(168) 168
Connective tissue
---. XVII. Protocollagen hydroxylase of pig uterus (Kao et al.)(151) 568
Convallatoxin
Comparison of intestinal penetration of cortisol and ---: Demonstration of a transport mechanism for cardiotonic steroids (Lauterbach)(150) 146
Copper
Cardiovascular studies on --- deficient swine. XI. Mucopolysaccharides and the mechanical properties of the aorta (Coulson, Linker)(158) 117
Copper
Neonatal hepatic mitochondrocuprein. III. Solubilization of the --- and protein from mitochondria of newborn liver by reduction with mercaptoethanol (Porter) (154) 236
Copper
Relationships between the --- atoms of ceruloplasmin. III. A difference in the reactivity of the chromophoric sites (Marriott, Perkins)(154) 501
Copper (II)
Two forms of --- in fungal p-diphenol oxidase (Malmström, Reinhammer, Vänngard)(156) 67
Copper mesoporphyrin
Preparation of mesohorphyrin IX and --- and manganese mesoporphyrin complexes of apohaemoglobin (Simo, Javaherian, Fabry)(160) 118
Cornea
Active sodium transport in the isolated bullfrog --- (Candia, Askew)(163) 262
Corneal endothelium
Levels of sodium-potassium-activated ATPase and magnesium-activated ATPase activity in bovine and feline --- and corneal epithelium (Rogers)(163) 50
Corneal epithelium
Levels of sodium-potassium-activated ATPase and magnesium-activated ATPase activity in bovine and feline corneal endothelium and --- (Rogers) (163) 50
Cortical slices
Extracellular space in rat renal --- incubated at 0.5° and 25° (Macknight)(163) 85
Corticosteroids
Studies on the reaction of cytochrome c with --- (Monder)(164) 369
Corticosteroid binding
Specificity and thermodynamic properties of the --- to a receptor of rat thymocytes in vitro (Schaumburg, Bojesen)(170) 172
Corticosteroidogenesis
Studies on ---. V. 11β-Hydroxylation of deoxycorticosterone by mitochondria incubated with malate, supernatant fraction and supernatant fraction plus pyruvate plus CO_2 (Péron, Caldwell)(164) 396
Corticotropin
Effect of --- on adrenal fatty acid synthesis (Robertson, Reddy)(164) 126
Corticotropin
Pituitary peptides. Naturally occurring analogues of porcine --- (Lande et al.) (154) 429
Cortisol
Comparison of intestinal penetration of --- and convallatoxin: Demonstration of a transport mechanism for cardiotonic ste-

roids (Lauterbach)(150) 146

Cortisol
  Effect of --- on genetic transcription in rat-liver chromatin (Stackhouse, Chetsanga, Tan)(155) 159

Cortisol
  Induction of glutamine synthetase by --- (Raina, Rosen)(165) 470

[11α-^{3}H]Cortisol
  --- as hydrogen donor in the reduction of androstendione and estrone in rat liver tissue (Wenzel)(152) 431

Cortisol biosynthesis
  --- from 3β, 17α, 21-trihydroxypregn-5-en-20-one by the intact human foetus at midpregnancy (Pasqualini et al.)(152) 648

Cortisone
  Liver microsomal inorganic pyrophosphate–glucose phosphotransferase: Alterations in activity–pH profiles by --- in vivo (Nordlie et al.)(158) 157

Corynebacterium diphtheriae
  Oxidative phosphorylation in --- (Kufe, Howland)(153) 291

Cotton effects
  --- of native and denaturated DNA–acridine orange complexes (Yamaoka)(169) 553

Counter-current distribution
  Presence of AMP-rich RNA in --- and column chromatography fractions of pea root nucleic acids (Ewing, Cherry)(161) 331

Counter-current distribution
  --- of RNA from rat liver: Effect of growth hormone, thyroxine and hydrocortisone on distribution patterns (Jackson, Sells)(155) 417

Coupling factors
  --- of oxidative phosphorylation (Vallejos, Van den Bergh, Slater)(153) 509

Crab poly d(A–T)
  Degradation of thymus DNA and --- by micrococcal nuclease in the presence of actinomycin D (Sulkowski, Laskowski Sr.)(157) 207

Creatine kinase
  Heterogeneity of pig heart --- (Keto, Doherty)(151) 721

Cryptococcus
  Occurrence of α(1–3)glucan in ---, Schizosaccharomyces and Polyporus species, and its hydrolysis by a Streptomyces culture filtrate lysing cell walls of Cryptococcus (Bacon et al.)(158) 313

Cryptoporphyrin
  --- and porphyrin a from pigeon-breast muscle (Lemberg, Gilmour)(156) 407

α-Crystallin
  Release of an N-terminal tetrapeptide from --- (Hoenders, Van Tol, Bloemendal)(160) 283

γ-Crystallin
  Carboxyl-terminal amino acids of rabbit lens --- (Manalaysay, Hines)(168) 383

Cucurbitacin B Δ^{23}-reductase
  --- from Cucurbita maxima. I. Assay methods, isolation and purification (Schabort, Potgieter, De Villiers)(151) 33

Cucurbitacin B Δ^{23}-reductase
  --- from Cucurbita maxima. II. Cofactor requirements, enzyme kinetics, substrate specificity and other characteristics (Schabort, Potgieter)(151) 47

Cucurbita maxima
  Cucurbitacin B Δ^{23}-reductase from ---. I. Assay methods, isolation and purification (Schabort, Potgieter, De Villiers)(151) 33

Cucurbita maxima
  Cucurbitacin B Δ^{23}-reductase from ---. II. Cofactor requirements, enzyme kinetics, substrate specificity and other characteristics (Schabort, Potgieter)(151) 47

Culture cells
  Glycoprotein biosynthesis in --- in vitro (Got et al.)(157) 599

Cumarin hydroxylase
  Relation between --- activity and the cytochrome P-450 content of rabbit-liver microsomes (Kratz)(165) 176

Cupric ion
  --- catalysis in hydrolysis of aminoacyl-tRNA (Schofield, Zamecnik)(155) 410

Current-clamp
  Voltage-clamp and --- studies on the action potential in Nitella translucens (Williams, Bradley)(150) 626

Curvularia lunata
  Hydroxylation of Reichstein's compound S with cell-free preparations from --- (Zuidweg)(152) 144

β-Cyanoalanine
  γ-Glutamyl-β-cyanoalanylglycine, a metabolite of --- in the rat and chick (Sasaoka et al.)(156) 128

Cyanoethylation
  Modification of nucleosides and nucleotides. VII. Selective --- of inosine and pseudouridine in yeast transfer RNA (Yoshida, Ukita)(157) 455

Cyanoethylation
  Modification of nucleosides and nucleotides. IX. Inactivation of coding response of yeast transfer RNA containing inosine residue by --- (Yoshida et al.)(166) 636

Cycasin
  Effect of --- on protein synthesis (Shank)(166) 578

Cyclic nucleotides
  Polarimetric assay of the activity of ribonuclease on --- (Sperling, Steinberg)(159) 408

Cyclic 3',5'-nucleotide phosphodiesterase
  Inhibition of --- by phenothiazine and reserpine derivatives (Honda, Imamura)(161) 267

Cyclitol
  Tentative rules for --- nomenclature (IUPAC-IUB Commission on Biochemical Nomenclature)(165) 1

Cyclohexanecarboxyl-CoA
  Hydrogen transfer in the enzymatic desaturation of --- (Galper, Babior)(158) 289

Cycloheximide
  Amino acid incorporation by isolated mitochondria in the presence of --- (Loeb, Hubby)(166) 745

Cycloheximide
  Effects of --- and 5-fluorouracil on the synthesis of RNA in yeast (Mayo, Andrean, De Kloet)(169) 297

Cycloheximide
  Influence of --- (actidione) upon pyrimidine nucleotide metabolism and RNA synthesis in cocklebur leaf discs (Ross)(166) 40

3α,5α-Cyclopregnane derivatives
  Microbial hydroxylation. III. 11α-Hydroxylation of some --- (Tan, Smith)(164) 389

Cyclotetrapeptides
  Stereochemical studies on cyclic peptides. III. Conformational analysis of --- (Ramakrishnan, Sarathy)(168) 402

Cyclotriprolyl
Stereochemical studies on cyclic peptides. II. Molecular structure of --- (Venkatachalam)(168) 397
β-Cystathionase
Rhizobium-synthesized phytotoxin: An inhibitor of --- in Salmonella typhimurium (Owens, Guggenheim, Hilton)(158) 219
Cystathionine
Abundance of --- in the pineal body. Free amino acids and related compounds of bovine pineal, anterior and posterior pituitary, and brain (LaBella, Vivian, Queen) (158) 286
Cystathionine γ-synthase
Proton retention in the γ-elimination reaction catalysed by --- (Guggenheim, Flavin) (151) 664
Cysteine auxotrophs
Complementation in vitro between --- of Salmonella typhimurium (Henderson, Loughlin)(156) 195
Cysteine biosynthesis
--- in Pasteurella multocida. Cysteine synthase, purification and properties (De Issaly) (151) 473
Cysteine-S-sulphate
Glutathione reductase-dependent metabolism of --- by Penicillium chrysogenum (Woodin, Segel)(167) 78
Cysteine synthase
Cysteine biosynthesis in Pasteurella multocida. ---, purification and properties (De Issaly)(151) 473
3-(S-Cysteinyl)glutaric acid
---, S-(1-methyl-2-carboxyethyl)cysteine and S-(1,2-dimethyl-2-carboxyethyl)cysteine in human urine (Kodama)(165) 432
Cystine transport
Developmental aspects of --- in rat intestinal segments (States, Segal)(163) 154
Cytidine diphosphate diglyceride
Synthesis of --- by cell-free extracts of yeast (Hutchison, Cronan Jr.)(164) 606
Cytochrome b_5
Characteristics of --- from outer membranes of rat liver mitochondria (Davis, Kreil) (162) 627
Cytochrome
--- of Chlorobium thiosulfatophilum (Meyer et al.)(153) 854
Cytochromes
Energy-transfer and electron-transfer systems in algal photosynthesis. II. Oxidation-reduction reactions of two --- and interactions of two photochemical systems in red algae (Nishimura)(153) 838
Cytochromes a and a_3
---: Catalytic activity and spectral shifts in situ and in solution (Nicholls, Kimelberg) (162) 11
Cytochrome c
Far ultraviolet circular dichroism spectra of --- (Myer)(154) 84
Cytochrome 558
Nature of haem moiety and oxidation-reduction potential of --- in Euglena chloroplasts (Ikegami, Katoh, Takamiya)(162) 604
Cytochrome P-450
Participation of the microsomal electron transport system involving --- in fatty acid ω-oxidation (Wade et al.)(162) 518
Cytochrome c
Reversible reaction of ε-amino groups of --- with salicylaldehyde to produce cytochrome c polymers (Williams Jr., Jacobs) (154) 323
Cytochrome c
Studies on the reaction of --- with corticosteroids (Monder)(164) 369
Cytochrome c_1
Reactions of --- with ligands (Schejter, Berke)(162) 459
Cytochrome C_{552}
--- and nitrite reduction in Escherichia coli (Cole)(162) 356
Cytochrome P-450
Electron spin resonance and absorption spectra of microsomal --- and its isocyanide complexes (Ichikawa, Yamano)(153) 753
Cytochrome P-450
Relation between cumarin hydroxylase activity and the --- content of rabbit-liver microsomes (Kratz)(165) 176
Cytochrome P-450
--- and steroid biosynthesis in the human placenta (Meigs, Ryan)(165) 476
Cytochrome oxidase
Physical state of ---: Relationship between membrane formation and ionic strength (Sun et al.)(153) 804
Cytochrome oxidation
Laser-induced kinetics of --- and the 518 mμ absorption change in spinach leaves and chloroplasts (Hildreth)(153) 197
Cytochrome c peroxidase
Thermal equilibrium between high- and low-spin states in ferric --- and some discussion on the enzyme-substrate complex (Iizuka, Kotani, Yonetani)(167) 257
Cytochrome ratios
Comparative study of --- in mitochondria from organs of the rat, chicken and guinea pig (Williams Jr.)(162) 175
Cytoplasmic determinant
Ultraviolet irradiation studies on the --- of yeast mitochondrion (Maroudas, Wilkie) (166) 681
Cytoplasmic membrane
Isolation and properties of the --- of Micrococcus denitrificans (Scholes, Smith) (153) 350
Cytoplasmic RNA
Labelling in vivo of nuclear RNA and --- of pigeon reticulocytes (Barlow, Mathias) (166) 379
Cytosine arabinoside
Studies on a new mechanism of resistance of L5178Y murine leukemia cells to --- (Momparler, Chu, Fischer)(161) 481
Cytosine arabinoside
Thymineless death induced by --- (Atkinson, Stacey)(166) 705
Cytosine arabinoside
Transport of two non-metabolized nucleosides, deoxycytidine and ---, in a sub-line of the L1210 murine leukemia (Kessel, Shurin) (163) 179

D

- Dehydroepiandrosterone
  - Androgen biosynthesis. I. Enzymatic cleavage of the cholesterol side-chain to --- and 2-methylheptan-6-one (Jungmann) (164) 110
- Dehydrosqualene
  - Occurrence of --- (C_{30} phytoene) in Staphylococcus aureus (Suzue, Tsukada, Tanaka) (164) 88
- Delipidized serum
  - Cholesterol uptake by L5178Y tissue culture cells: Studies with --- (Rothblat, Buchko, Kritchevsky) (164) 327
- Denaturation
  - Effect of salt extraction and heat --- on the behaviour of rat liver chromatin (Samis Jr., Poccia, Wulff) (166) 410
- Denaturation
  - --- map of polyoma virus DNA (Bourguignon) (166) 242
- Denatured DNA
  - Trans-syn thymine dimers in ultraviolet-irradiated --- : Identification and photoreactivability (Ben-Hur, Ben-Ishai) (166) 9
- Denervation
  - α-Aminoisobutyric acid uptake in vitro by rat extensor digitorum longus muscle after --- and tenotomy (Bombara, Bergamini) (150) 226
- Density gradients
  - Calculation of equilibrium --- (Jeffrey) (158) 295
- Deoxyadenosine
  - Concerning the site of action of --- (deoxyadenosine triphosphate) upon nucleic acid synthesis in the cancer cell (Vornovitskaja, Shapot, Nicolskaja) (166) 596
- 3'-Deoxyadenosine
  - Inhibition of the synthesis of 5-phosphoribosyl-1-pyrophosphate by --- and structurally related nucleoside analogs (Tyrsted, Sartorelli) (155) 619
- Deoxyadenosine kinase
  - Regulatory properties of --- (Krygier, Momparler) (161) 578
- Deoxyadenosine 5'-triphosphate
  - Inhibition of deoxycytidylic acid kinase and deoxyguanylic acid kinase activity by ATP and --- in pneumococci (Firshein, Broker) (166) 261
- 5'-Deoxyadenosyl-10-chlorocobalamin
  - coenzyme activity of --- in propanediol dehydratase system (Tamao et al.) (151) 260
- 3-Deoxy-D-arabino-heptulosonate 7-phosphate synthase
  - Aromatic biosynthesis in yeast. II. Feedback inhibition and repression of --- (Doy) (151) 293
- 3-Deoxy-D-arabino-heptulosonate 7-phosphate synthase
  - Exogenous environment as a factor in the control of the --- of Neurospora crassa (Doy, Halsall) (167) 422
- 3-Deoxy-D-arabino-heptulosonate 7-phosphate synthase
  - Nature of --- in extracts of wild-type Neurospora crassa: A ping-pong reaction controlled by two activating substrates and three allosteric negative modifiers (Doy) (159) 352
- Deoxycorticosterone
  - Studies on corticosteroidogenesis. V. 11β-Hydroxylation of --- by mitochondria incubated with malate, supernatant fraction and supernatant fraction plus pyruvate plus CO_2 (Péron, Caldwell) (164) 396
- Deoxycytidine
  - Transport of two non-metabolized nucleosides, --- and cytosine arabinoside, in a subline of the L1210 murine leukemia (Kessel, Shurin) (163) 179
- Deoxycytidylic acid kinase
  - Inhibition of --- and deoxyguanylic acid kinase activity by ATP and dATP in pneumococci (Firshein, Broker), (166) 261
- 2-Deoxy-D-glucose
  - Incorporation of --- into glycogen (Biely, Farkaš, Bauer) (158) 487
- 2-Deoxyglucose
  - Influence of testosterone on penetration of α-aminoisobutyric acid and --- in male rat sex accessory tissues (Mills, Spaziani) (150) 435
- 2-Deoxy-D-glucose
  - Inhibition of palmitate oxidation by --- in ascites tumour cells (Sauermann) (170) 88
- 2-Deoxyglucose
  - Stimulation of ascites tumour cell respiration by low concentrations of --- (Coe) (162) 470
- 2-Deoxy-D-glucose transport
  - Transport-associated phosphorylation of 2-deoxy-D-glucose and --- in yeast (Van Steveninck) (163) 386
- 3-Deoxy-D-glucosulose
  - --- in fed and fasted mouse livers (Baker, Együd) (165) 293
- Deoxyguanylic acid kinase
  - Inhibition of deoxycytidylic acid kinase and --- activity by ATP and dATP in pneumococci (Firshein, Broker) (166) 261
- Deoxyhaemoglobin
  - Complexes of phenyldiazene (phenyldiimide) with --- and ferrohaem (Huang, Kosower) (165) 483
- Deoxynucleosides
  - Chemical analysis of DNA alterations. II. Alteration and liberation of bases of deoxynucleotides and --- induced by hydrogen peroxide and hydroxylamine (Rhaese, Freese, Melzer) (155) 491
- Deoxynucleoside phosphorylases
  - Inducer of the --- and deoxyriboaldolase in Escherichia coli (Barth et al.) (161) 554
- Deoxynucleotides
  - Chemical analysis of DNA alterations. II. Alteration and liberation of bases of --- and deoxynucleosides induced by hydrogen peroxide and hydroxylamine (Rhaese, Freese, Melzer) (155) 491
- Deoxynucleotidyl transferases
  - Facile separation of terminal and replicative --- of Walker-256 carcinosarcoma (Rothschild, Halpern, Smith) (169) 218
- Deoxyriboaldolase
  - Inducer of the deoxynucleoside phospho-

ryiases and --- in Escherichia coli (Barth et al.)(161) 554
Deoxyriboaldolase
Thymineless mutants of Escherichia coli with deficiencies in deoxyribomutase and --- (Munch-Petersen)(161) 279
Deoxyribomutase
Thymineless mutants of Escherichia coli with deficiencies in --- and deoxyriboaldolase (Munch-Petersen)(161) 279
Deoxyribonuclease
Effect of --- on newly formed DNA (Shah, Hughes)(161) 261
Deoxyribonucleases
Intracellular localization of --- in Escherichia coli (Obinata, Mizuno)(155) 98
Deoxyribonucleic acid, see DNA
Deoxyribonucleoprotein
Degradation of histones during the manipulation of isolated nuclei and --- (Stellwagen, Reid, Cole)(155) 581
Deoxyribonucleoprotein
Gel filtration of --- on agarose (Loeb) (157) 424
Deoxyribonucleoprotein
New type of --- isolated from rabbit thymus nuclei (Rees, Krueger)(161) 558
Deoxyribonucleoside metabolism
--- by the human erythrocyte (Bartlett) (156) 254
2-Deoxysucrose
Transglycolytic reaction of nucleotides of 2-deoxy-sugars. I. Biosynthesis of --- (Farkaš, Biely, Bauer)(165) 63
Deoxy-4-thiothymidine 3',5'-phosphate
Synthesis of --- (Scheit)(157) 632
Deoxythymidine 3'-mono- and diphosphate
Metabolism of --- in normal and T_4 bacteriophage-infected Escherichia coli (Harris, Panter, Symons)(161) 291
Deproteinization
Selective --- of ribosomes by sodium dodecyl sulphate (Stutz, Rawson)(161) 564
Derepression
Studies on the size of the messenger RNA transcribed from the histidine operon during simultaneous and sequential --- (Venetianer et al.)(166) 124
Dermatan sulphate
Structure of ---. IV. Glycopeptides from the carbohydrate-protein linkage region of pig skin --- (Fransson)(156) 311
Deuridylic RNA
Extent and specificity of the degradation of polynucleotide chain under the conditions of the preparation of --- (Budowsky, Simukova, Guskova)(166) 755
Deuterium oxide
Effect of --- on respiratory-chain phosphorylation in sub-mitochondrial particles (Muraoka, Slater)(162) 170
Dextran
Partition of DEAE-dextran in aqueous --- -polyethylene glycol phases and its effect on the cell partition in such systems (Walter, Garza, Coyle)(156) 409
Diabetes
Effect of alloxan --- on polyenoic fatty acid synthesis by retinal tissue (Futterman, Rollins, Vacano)(164) 433
Diabetes
Effect of --- on glucose metabolism in isolated fat cells (Chiappe de Cingolani, Brenner)(152) 217
Diabetes
Nature of the increase in liver microsomal glucose-6-phosphatase activity during the early stages of alloxan-induced --- (Jakobsson, Dallner)(165) 380
Diabetic rats
Glycogen biosynthesis in leukocytes of normal and alloxan --- (Pérez, Hedeskov, Esmann)(156) 414
Diacyl $[1\text{-}^{14}C]$alkoxyglycerols
Deacylation of isomeric --- by pancreatic lipase (Snyder, Piantadosi)(152) 794
Diacyl ether phospholipids
Phospholipids in tissue of the eye. I. Isolation, characterization and quantitative analysis by two-dimensional thin-layer chromatography of --- and vinyl ether phospholipids (Broekhuyse)(152) 307
1,2-Diacyl phosphatidylcholines
Monolayer characteristics of saturated --- (lecithins) and phosphatidylethanolamines at the air-water interface (Phillips, Chapman)(163) 301
Diacyl-L-phosphatidylcholines
Physical studies of phospholipids. VIII. Nuclear magnetic resonance studies of --- (lecithins)(Salsbury, Chapman)(163) 314
Diaphorase
Enzymatic nitrate reduction with flavin nucleotides reduced by a new chloroplast NADH-specific --- (Paneque et al.)(162) 149
Diaphorase
Relations between conformations and activities of lipoamide dehydrogenase. I. Relation between --- and lipoamide dehydrogenase activities upon binding of FAD by the apoenzyme (Kalse, Veeger)(159) 244
Diborane
Studies on glycoproteins. XVIII. Formation of --- and dimethoxyborane in the lithium borohydride test for esters as a source of misinterpretation (Gottschalk, König) (158) 358
Dichlorophenol-stimulated NADH oxidase
Purification and properties of --- from rat uterus (Coleman, Bever)(151) 267
2,4-Dichlorophenoxyacetic acid
Enhancement by --- of chromatin RNA polymerase in soybean hypocotyl tissue (O'Brien et al.)(169) 35
Dictyostelium discoideum
Activities of glycolytic enzymes during the early stages of differentiation in the cellular slime mold --- (Cleland, Coe)(156) 44
Dictyostelium discoideum
Studies on the ribosomes from the cellular slime molds, --- and Dictyostelium purpureum (Ceccarini, Maggio)(166) 134
Dictyostelium purpureum
Studies on the ribosomes from the cellular slime molds, Dictyostelium discoideum and --- (Ceccarini, Maggio)(166) 134
N,N'-Dicyclohexylcarbodiimide
Oligomycin-like inhibition of yeast respiration by --- and the nature of energy coupling in intact yeast cells (Kováč, Galeotti, Hess)(153) 715
Diester waxes
Isolation and analysis of two types of --- from the skin surface lipids of the rat (Nikkari, Haahti)(164) 294
Diethanoldisulphide
Selective loss of binding of aminoacyl-tRNA by ribosomes treated with --- (Furano)(161) 255
Diether phospholipids

  - Chemical synthesis of 1-O-(D)- and 3-O-(L)-glyceryl monoethers, glyceryl diethers and derivatives: Glycerides, monoester phospholipids and --- (Chacko, Hanahan) (164) 252
- Diethyl ether
  - Studies on the respiratory chain-linked NADH dehydrogenase. I. Effect of --- on particulate NADH dehydrogenase (Kaniuga, Gardas, Jakubiak)(153) 317
- Diethyl-p-nitrophenylphosphate
  - Hydrolysis of --- and ethyl-p-nitrophenylethylphosphonate by human sera (Škrinjarić-Špoljar, Reiner)(165) 289
- Diethylpyrocarbonate
  - Active site of ATP:guanidine phosphotransferases. II. Evidence for a critical histidine residue through use of a specific reagent, --- (Pradel, Kassab)(167) 317
- Differential scanning calorimetry
  - Studies on lecithin-cholesterol-water interactions by --- and X-ray diffraction (Ladbrooke, Williams, Chapman)(150) 333
- Differential thermal analysis
  - Application of --- to the study of hydrothermal shrinkage in epimysial and corium collagen (McClain et al.)(168) 143
- Differentiation
  - Activities of glycolytic enzymes during the early stages of --- in the cellular slime mold Dictyostelium discoideum (Cleland, Coe) (156) 44
- Digitonin
  - Isolation and properties of two --- -soluble pigment-protein complexes from spinach (Wessels)(153) 497
- Digitonin fragments
  - Ultrastructure of sonic and --- from beef heart mitochondria (Malviya et al.) (162) 195
- Dihydro-5-azaorotic acid
  - ---, first specific inhibitor of dihydro-orotate dehydrogenase (Santilli et al.)(155) 623
- Dihydrofolate dehydrogenase
  - Effects of orotic acid on --- and on tetrahydrofolate-dependent enzymes in the chick liver (Pasquali et al.)(158) 482
- Dihydro-orotate dehydrogenase
  - Dihydro-5-azaorotic acid, the first specific inhibitor of --- (Santilli et al.)(155) 623
- Dihydrosphingosine
  - Separation of sphingosine, --- and phytosphingosine by chromatography on columns of silica gel (Barenholz, Gatt) (152) 790
- Dihydroxyacetone
  - Inhibition of glycerol dehydrogenase from Aerobacter aerogenes by ---, high ionic strength, and monovalent cations (Strickland, Miller)(159) 221
- 2,3-Dihydroxybenzoic acid
  - Isochorismic acids: A new intermediate in the biosynthesis of --- (Young, Batoerham, Gibson)(165) 567
- 2,3-Dihydroxybenzoic acid
  - Regulation of synthesis of --- in Bacillus subtilis by iron and a biological secondary hydroxamate (Byers, Lankford)(165) 563
- Dimethoxyborane
  - Studies on glycoproteins. XVIII. Formation of diborane and --- in the lithium borohydride test for esters as a source of misinterpretation (Gottschalk, König)(158) 358
- Dimethylaminoethylphosphonic acid
  - Incorporation of trimethylaminoethylphosphonic acid and --- into lipids of housefly larvae (Bieber)(152) 778
- 5,6-Dimethylbenzimidazolyl cobamide
  - Isolation of --- coenzyme as a cofactor for glutamate formation from Acetobacter suboxydans (Kato, Hayashi, Kamikubo) (165) 233
- S-(1,2-Dimethyl-2-carboxyethyl)cysteine
  - 3-(S-Cysteinyl)glutaric acid, S-(1-methyl-2-carboxyethyl)cysteine and --- in human urine (Kodama)(165) 432
- $N^4,O^{2'}$-Dimethylcytidine
  - Characterization of ---, a rare nucleoside constituent of Escherichia coli 16-S RNA (Nichols, Lane)(166) 605
- [2-Me-^{14}C]2,4-Dimethylheptanoic acid
  - Metabolism in vivo of --- (Miller, Tannebaum)(152) 511
- Dimethylnitrosamine
  - Methylated bases in liver nucleic acids from rats treated with --- (Lawley et al.) (157) 646
- Dimethyl phosphatidate
  - Monomethyl phosphatidate and --- from different subtypes of choline and ethanolamine glycerophosphatides (Renkonen)(152) 114
- 2,4-Dinitrophenol
  - Effect of --- and other uncoupling agents on the nitrate assimilation and nitrite assimilation by Chlorella (Ahmed, Morris) (162) 32
- 2,4-Dinitrophenol
  - Effects of sodium azide and --- on phosphorylation reactions and ion fluxes in Saccharomyces cerevisiae (Riemersma) (153) 80
- Dinitrophenol-induced ATPase
  - Effect of monovalent cations on the --- of rat-liver mitochondria (Amons, Van den Bergh, Slater)(162) 452
- Dinitrophenol-induced ATPase
  - Inhibition by anions of --- of mitochondria (Veldsema-Currie, Slater)(162) 310
- Dinoflagellate
  - Monoenoic and docosahexaenoic fatty acids of a heterotrophic --- (Harrington, Holz Jr.)(164) 137
- Dio-9
  - Action of ---: Energy-linked swelling of rat-liver mitochondria (Fisher, Guillory) (162) 182
- Diol dehydrogenases
  - Enzymic oxidation of D-1-aminopropan-2-ol by --- of microbial origin (Lowe, Turner) (170) 455
- Dioxygenase
  - Time sequence of interactions of a --- with its substrates (Dagley, Geary)(167) 459
- L-α-Dipalmitoyl lecithin
  - Surface chemistry of --- at the air-water interface (Vilallonga)(163) 290
- p-Diphenol oxidase
  - Two forms of copper (II) in fungal --- (Malmström, Reinhammer, Vänngard)(156) 67
- p-Diphenol oxidase
  - Probe of subunit structure in fungal --- by treatment with guanidine hydrochloride and at high pH (Butzow)(168) 490
- p-Diphenol oxidase
  - Redox potential of fungal --- (Fee, Malmström)(153) 299
- 2,3-Diphosphoglycerate
  - Factors affecting the synthesis of --- in haemolysates of human erythrocytes (Forst-

ner, Fortier, Lionetti)(158) 317
2,3-Diphosphoglycerate
Hg^{2+}-induced dissociation of exchange reactions from catalytic activity of --- -dependent phosphoglyceromutases (Grisolia, Torralba, Tecson)(151) 367
2,3-Diphosphoglycerate metabolism
--- and glycolysis in human erythrocytes under the influence of dipyridamole and inorganic sulphur compounds (Duhm, Deuticke, Gerlach)(170) 452
2,3-Diphosphoglyceric acid
Regulation of AMP deaminase by ---: A possible mechanism for the control of adenine nucleotide metabolism in human erythrocytes (Askari, Rao)(151) 198
Diphosphoinositide
Structures of enzymically produced --- and triphosphoinositide (Prottey, Salway, Hawthorne)(164) 238
Dipyridamole
2,3-Diphosphoglycerate metabolism and glycolysis in human erythrocytes under the influence of --- and inorganic sulphur compounds (Duhm, Deuticke, Gerlach) (170) 452
Direct lytic factor
--- of cobra venom. Purification and chemical characterization (Aloof-Hirsch, De Vries, Berger)(154) 53
Disaccharidases
Spatial relationship between intestinal --- and the sugar active transport system (Malathi, Crane)(163) 275
Disc electrophoresis
Quantitative aspects of --- (Kruski, Narayan)(168) 570
Dissociation
Effect of γ-irradiation on Escherichia coli ribosomes: Reversible --- (Tamaoki et al.) (157) 655
Dissociation
Reversible --- of Escherichia coli ribosomes by hydrogen peroxide (Nakamura, Tamaoki)(161) 368
Distribution of RNA
--- and ribosomes in reticulocytes (Burka) (166) 672
Divalent cations
Stability of electrical coupling in leech giant nerve cells: ---, propionate ions, tonicity and pH (Payton, Loewenstein)(150) 156
DNA
Action of oxygenated water on --- in the presence of ferrous ion and light (Schweitz) (166) 720
DNA
Alkaline denaturation of --- from various sources (Zimmer)(161) 584
DNA
Anthramycin, a new type of DNA-inhibiting antibiotic: Reaction with --- and effect on nucleic acid synthesis in mouse leukemia cells (Kohn, Bono Jr., Kann Jr.)(155) 121
DNA
Base complementarity between rapidly labelled RNA in Escherichia coli B infected with ultraviolet-irradiated T2 phages and T2- --- (Yamada, Nozu)(169) 67
DNA
Binding of actinomycin D and F to bacterial --- (Cavalieri, Nemchin)(166) 722
DNA
Binding of calcium with --- and DNA-protein complexes (Chang, Carr)(157) 127
DNA
Biophysical properties of a vibrio phage and its --- (Mitra, Basu)(155) 143
DNA
Buoyant density of tobacco and spinach chloroplast --- (Whitfeld, Spencer)(157) 333
DNA
Chemical analysis of --- alterations. I. Base liberation and backbone breakage of DNA and oligodeoxyadenylic acid induced by hydrogen peroxide and hydroxylamine (Rhaese, Freese)(155) 476
DNA
Chemical analysis of --- alterations. I. Alteration and liberation of bases of deoxynucleotides and deoxynucleosides induced by hydrogen peroxide and hydroxylamine (Rhaese, Freese, Melzer)(155) 491
DNA
Chemical analysis of --- alterations. III. Isolation and characterization of adenine oxidation products obtained from oligo- and monodeoxyadenylic acids treated with hydroxyl radicals (Rhaese)(166) 311
DNA
Circular dichroism of protonated --- (Luck, Zimmer, Snatzke)(169) 548
DNA
Comparative study of ultraviolet optical rotatory dispersion of ---'s from various sources at neutral and acidic pH (Luck, Zimmer)(169) 466
DNA
Comparison of chloroquine binding to ---, and polyadenylic and polyguanylic acids (Blodgett, Yielding)(169) 451
DNA
Conformation-dependent hydrolysis of --- by micrococcal nuclease (Wingert, Von Hippel)(157) 114
DNA
Degradation of thymus --- and crab poly d(A-T) by micrococcal nuclease in the presence of actinomycin D (Sulkowski, Laskowski Sr.)(157) 207
DNA
Denaturation map of polyoma virus --- (Bourguignon)(166) 242
DNA
Difference in binding of 2-acetylaminofluorene to rat liver --- and ribosomal RNA in vivo (Kriek)(161) 273
DNA
Differential effects of putrescine, cadaverine and glyoxal-bis (guanylhydraxone) on --- - and nucleohistone supported DNA synthesis (Schwimmer)(166) 251
DNA
Differential responses of DNA and RNA polymerase to modifications of the template rat liver --- caused by action of the carcinogen acetylaminofluorene in vivo and in vitro (Troll et al.)(157) 16
DNA
Effect of deoxyribonuclease on newly formed --- (Shah, Hughes)(161) 261
DNA
Effect of γ-radiation of aqueous solutions of ---'s of different base composition (Rafi, Weiss, Wheeler)(169) 230
DNA
Effect of RNA on the infectivity of phage --- (Bailey, Fry)(166) 726
DNA
Efficiency of utilization of thymine and 5-

bromouracil for normal and repair --- synthesis in bacteria (Kanner, Hanawalt) (157) 532
DNA
Evidence for repair replication of HeLa cell --- damaged by ultraviolet light (Cleaver, Painter)(161) 552
DNA
Formation of the thymine radical in irradiated --- (Lenherr, Ormerod)(166) 298
DNA
Genetic transformation of the bacteriophage T4. II. Biological activity of --- fragments Veldhuisen, Poelman, Cohen) (161) 109
DNA
Genetic transformation of the bacteriophage T4. III. Influence of ultraviolet irradiation and nitrous acid on the biological activity of isolated T4 --- (Veldhuisen, Poelman, Cohen)(161) 115
DNA
Inactivation of transforming --- by tritium disintegrations in vivo (McCarthy, Nester) (166) 249
DNA
Incorporation of specifically labelled [^{14}C]glucose into herpes simplex --- (Fisher, Fisher Jr.)(157) 634
DNA
Interaction of actinomycin D with the chymotrypsinogen---- complex (Bobb) (169) 457
DNA
Interactions between --- and hen's egg white lysozyme: Effects of composition and structural changes of DNA, ionic strength and temperature (Cattan, Bourgoin) (161) 56
DNA
Intracellular localization and hybridization studies of a human satellite --- (Giacomoni, Corneo)(166) 586
DNA
Irreversible effects of formaldehyde on --- (Collins, Guild)(157) 107
DNA
Isolation of chloroplasts free from nuclear --- contamination (Kung, Williams) (169) 265
DNA
Isolation of highly polymerized --- from maize (Pitout, Potgieter)(161) 188
DNA
Isolation and properties of --- from eggs and gastrulae of Ascaris lumbricoides (Bielka, Schultz, Böttger)(157) 209
DNA
Isolation of --- and ribosomal RNA from rat liver (Irving, Veazey)(166) 246
DNA
Localization of amplified ribosomal --- in the oocyte of Xenopus laevis (Evans, Birnstiel)(166) 274
DNA
Metal ions and hydrogen peroxide. --- denaturation under the influence of pH and metal ions (Erlenmeyer et al.)(157) 637
DNA
--- methylated in vitro by a monofunctional alkylating agent as a substrate for a specific nuclease from Micrococcus lysodeikticus (Strauss, Robbins)(161) 68
DNA
Mitochondrial ---. III. Electron microscopy of DNA released from mitochondria by osmotic shock (Van Bruggen et al.)(161) 402
DNA
Mode of action of neocarzinostatin: Requirement of protein synthesis for neocarzinostatin-mediated --- degradation in Sarcina lutea (Ono et al.)(155) 616
DNA
Nuclear system for --- replication from synchronized HeLa cells (Friedman, Mueller)(161) 455
DNA
Nucleotide clusters in ---. III. Separation of pyrimidine isostichs according to base composition (Černý, Mushynski, Spencer) (169) 439
DNA
Number of superhelical turns in mitochondrial --- (Ruttenberg et al.)(157) 429
DNA
Peroxide induced binding of hydrocarbons to --- (Morreal et al.)(169) 224
DNA
Presence of minor bases in --- of phages DD7 and S_d and their hosts (Nikolskaya et al.)(155) 626
DNA
Radiolysis of aqueous solutions of --- and related substances; reaction of hydrogen atoms (Scholes, Simic)(166) 255
DNA
Radioresistant nature of the transforming activity of --- in bacterial spores (Tanooka, Sakakibara)(155) 130
DNA
Reaction of N-methyl N'-nitro-N-nitroguanidine and N-methyl-N-nitroso-p-toluenesulfonamide with --- in vitro (McCalla) (155) 114
DNA
Release of --- from phage on the top of sucrose gradients (Yamagishi)(166) 738
DNA
---repair after ethyl methanesulphonate treatment of Escherichia coli (Verly et al.) (161) 548
DNA
Role of a competence in the infection of Escherichia coli spheroplasts by isolated phage --- (Iliashenko, Dityatkin, Danilei-chenko)(161) 259
DNA
Search for a mechanism for the increased sensitivity of 5-bromouracil-substituted --- to ultraviolet radiation (Lion)(155) 505
DNA
Sedimentation of --- from bacteriophage λ infected Escherichia coli (Carter, Smith) (166) 735
DNA
Size, number and distribution of polyguanylic acid binding sites on the separated --- strands of coliphage T_7 (Summers, Szybalski)(166) 371
DNA
Specific hybridization of amino acid-specific transfer RNA to --- in Escherichia coli (Seno, Nishimura)(157) 97
DNA
Spectral properties of chymotrypsinogen---- complexes and the effect of heating (Bobb)(155) 566
DNA
Studies with hydroxyurea. VIII. The --- of hydroxyurea-treated cells (Rosenkranz,

Jacobs, Carr)(161) 428

DNA
Studies on the intranuclear distribution and properties of mouse satellite --- (Schildkraut, Maio)(161) 76

DNA
Studies of the --- from mesophilic and thermophilic bacteria (Stenesh, Roe, Snyder) (161) 442

DNA
Study of the use of alkaline degradation of --- derivatives as a procedure for the determination of nucleotide distribution (Brammer et al.)(166) 732

DNA
Techniques for hybridization of --- in vitro using non-radioactive DNA and DNA made radioactive by neutron activation, alkylation with radioactive alkylating agents, and by exchange with ^3H_2O (Searcy) (166) 360

DNA
Thymidine kinase, thymidylate kinase and $^{32}P_i$ and [^{14}C]thymidine incorporation into --- during early embryogenesis of the sea urchin (Nagano, Mano)(157) 546

DNA
Translational characteristics of ribosomes and coding properties of transfer RNA in the mutant of Bacterium paracoli with the increased GC content of --- (Gause, Grünberger)(166) 538

DNA
Trans-syn thymine dimers in ultraviolet-irradiated denatured ---: Identification and photoreactivability (Ben-Hur, Ben-Ishai)(166) 9

DNA
Ultraviolet resistance of --- in spore spheroplasts of Bacillus subtilis as measured by the transforming activity (Tanooka) (166) 581

DNA
Uptake of polynucleotides by mouse ascites tumour cells. V. Uptake of --- (Schell) (166) 156

DNA
Use of nitrocellulose membrane filters for --- samples (Fishman, Schiff)(157) 419

DNA
X-ray diffraction study of phage SPO-1 --- (Higuchi, Iitaka, Tsuboi)(166) 717

DNA-acridine orange complexes
Cotton effects of native and denatured --- (Yamaoka)(169) 553

DNA denaturation
Metal ions and hydrogen peroxide. --- under the influence of pH and metal ions (Erlenmeyer et al.)(157) 637

DNA-dependent RNA polymerase
Inhibition of --- by the exotoxin of Bacillus thuringiensis var. gelechiae (Šebesta, Horská)(169) 281

DNA-like RNA
Occurrence of light particles carrying --- in the microsomal fraction of adult rat brain (Samec, Jacob, Mandel)(161) 377

DNA-like RNA
Synthesis of --- in synchronized cultures of mammalian cells (Bello)(157) 8

DNA nucleotidyltransferase
Rapid isolation of a regenerating rat liver --- fraction which shows a preference for native DNA as primer (Bellair)(161) 119

DNA polymerase
Differential responses of --- and RNA polymerase to modifications of the template rat liver DNA caused by action of the carcinogen acetylaminofluorene in vivo and in vitro (Troll et al.)(157) 16

DNA polymerase
Increased --- activity in Escherichia coli C after infection with phage ΦX174 (Hun, Helleiner)(155) 107

DNA polymerase
Kinetic studies on --- (Beyersmann, Schramm)(159) 64

DNA polymerase
Phage ΦX174 --- (Grunau, Daniel)(166) 728

DNA-protein complexes
Binding of calcium with DNA and --- (Chang, Carr)(157) 127

DNA repair
Efficiency of utilization of thymine and 5-bromouracil for normal and --- synthesis in bacteria (Kanner, Hanawalt)(157) 532

DNA repair
--- after ethyl methanesulphonate treatment of Escherichia coli (Verly et al.) (161) 548

DNA replication
Nuclear system for --- from synchronized HeLa cells (Friedman, Mueller)(161) 455

DNA × RNA hybridization
Studies on tissue specificities of nuclear and ribosomal RNA using the --- technique (Bielka, Junghahn)(166) 698

DNA synthesis
Differential effects of putrescine, cadaverine and glyoxal-bis(guanylhydrazone) on DNA- and nucleohistone-supported --- (Schwimmer)(166) 251

DNA synthesis
Pitfalls of measuring --- kinetics as exemplified in ultraviolet radiation studies (Smith, O'Leary)(169) 430

Docosahexaenoic fatty acids
Monoenoic and --- of a heterotrophic dinoflagellate (Harrington, Holz Jr.)(164) 137

Docosa-6,9,12,15-tetraenoate
Synthesis and metabolism of hexadeca-4,7,10-trienoate, eicosa-8,11,14-trienoate, docosa-10,13,16-trienoate and --- in the rat (Sprecher)(152) 519

Docosa-10,13,16-triencate
Synthesis and metabolism of hexadeca-4,7,10-trienoate, eicosa-8,11,14-trienoate, --- and docosa-6,9,12,15-tetraenoate in the rat (Sprecher)(152) 519

DOPA
Reduction of ferricytochrome c during the enzymic oxidation of --- (Kertesz)(167) 250

E

Echinoid RNA
  Template capabilities and size distribution of --- during early development (Slater, Spiegelman)(166) 82
Echinomycin
  Effect of olivomycin and --- on initiation and growth of RNA chains catalyzed by RNA polymerase (Gause, Loshkareva, Zbarsky)(166) 752
Ehrlich ascites
  Infrared spectra of plasma membrane and endoplasmic reticulum of --- carcinoma (Wallach, Zahler)(150) 186
Eicosa-8, 11, 14-trienoate
  Synthesis and metabolism of hexadeca-4, 7, 10-trienoate, ---, docosa-10, 13, 16-trienoate and docosa-6,9,12,15-tetraenoate in the rat (Sprecher), (152) 519
Elastin
  Heterogeneity of soluble --- (Podrazký) (160) 277
Elastin
  Isolation and amino acid composition of insoluble ---. Bovine foetal and adult aorta and ligamentum nuchae (Steven, Jackson) (168) 334
Elastin
  Pattern of lysine incorporation into --- of growing chick aorta (Sandberg, Cleary) (154) 411
Electrical excitability
  Calcium effects in the --- of "split" frog skin (Fishman, Macey)(150) 482
Electrical excitability
  Studies on a material which induces --- in bimolecular lipid membranes. I. Production, isolation, gross identification and assay (Kushnir)(150) 285
Electrical properties
  Effects of a d.c. potential bias on the --- of bimolecular lipid membranes (Rosen, Sutton)(163) 226
Electrodialysis
  --- of Anabaena flos-aquae A-37 (Tischer et al.)(156) 403
Electrofocusing
  Simple apparatus and procedure for --- experiments: pI of lactate dehydrogenase and isocitrate lyase (Weller, Heaney, Sjogren)(168) 576
Electrolyte
  Water and --- contents of rat renal cortical slices incubated in potassium-free media and media containing ouabain (MacKnight)(150) 263
Electrolyte composition
  Effect of transient swelling upon the --- of kidney tissue (Wiggins)(158) 281
Electrolyte contents
  Water and --- of rat renal cortical slices incubated in medium containing p-chloromercuribenzoic acid or p-chloromercuribenzoic acid and ouabain (Macknight) (163) 500
Electrolyte exchange
  --- in isolated spinach chloroplasts (Winocur, Macey, Tolberg)(150) 32
Electron carriers
  Relation of the oxidoreduction level of --- to ion transport in slices of avian salt-gland (Van Rossum)(153) 124
Electron microscopic fixatives
  Effects of --- on cell membranes of the perfused rat heart (Krames, Page)(150) 24
Electron microscopy
  Mitochondrial DNA. III. --- of DNA released from mitochondria by osmotic shock (Van Bruggen et al.)(161) 402
Electron microscopy
  Osmiumtetroxide fixation of lipids for --- : A possible reaction mechanism (Riemersma)(152) 718
Electron microscopy
  --- study of the tertiary structure of covalently closed polyoma virus DNA (Bourguignon, Bourgaux)(169) 476
Electron paramagnetic resonance
  --- signal produced by ferricyanide in photosynthetic plant materials (Weaver) (162) 286
Electron paramagnetic resonance
  --- studies on photosynthesis in bacteria. I. Properties of photo-induced EPR-signals of Chromatium D (Schleyer)(153) 427
Electron spin resonance
  --- and absorption spectra of microsomal cytochrome P-450 and its isocyanide complexes (Ichikawa, Yamano)(153) 753
Electron spin resonance
  --- of non-haem iron in xanthine oxidase (Gibson, Bray)(153) 721
Electron transfer
  Energy-transfer and --- systems in algal photosynthesis. II. Oxidation-reduction reactions of two cytochromes and interactions of two photochemical systems in red algae (Nishimura)(153) 838
Electron transfer
  Light-induced --- in Chromatium Strain D. III. Photophosphorylation by Chromatium chromatophores (Cusanovich, Kamen) (153) 418
Electron transfer
  Oxidation-reduction potentials and stoichiometry of --- in ferredoxins (Tagawa, Arnon)(153) 602
Electron transport
  Kinetic studies on --- components in isolated chloroplasts. I. The effect of the pool of electron carriers between the two photosystems on P_{700} changes (Malkin)(162) 392
Electron transport
  Light-induced --- in Chromatium Strain D. I. Isolation and characterization of Chromatium chromatophores (Cusanovich, Kamen)(153) 376
Electron transport
  Light-induced --- in Chromatium Strain D. II. Light-induced absorbance changes in Chromatium chromatophores (Cusanovich, Bartsch, Kamen)(153) 397
Electron transport
  Nature of --- and energy transport in mitochondria. II. Multiple activation of mitochondrial respiration (Nijs)(153) 70
Electron transport

  - Stoichiometric relation of phosphorylation to --- in isolated chloroplasts (Izawa, Good)(162) 380
- Electron transport system
  - Effect of combined-nitrogen sources on the synthesis and function of the --- of Azotobacter vinelandii (Knowles, Redfearn) (162) 348
- Electron transport system
  - Participation of the microsomal --- involving cytochrome P-450 in fatty acid ω-oxidation (Wada et al.)(162) 518
- Electrophoresis
  - Quantitative aspects of disc --- (Kruski, Narayan)(168) 570
- γ-Elimination reaction
  - Proton retention in the --- catalysed by cystathionine γ-synthase (Guggenheim, Flavin)(151) 664
- Embryo
  - Globins and their synthesis in the erythroid cells of the chick --- (D'Amelio, Constantino)(155) 614
- Embryogenesis
  - Thymidine kinase, thymidylate kinase and $^{32}P_i$ and $[^{14}C]$ thymidine incorporation into DNA during early --- of the sea urchin (Nagano, Mano)(157) 546
- Embryonic cartilage
  - Studies on the synthesis and intracellular accumulation of protocollagen in organ culture of --- (Bhatnagar, Kivirikko, Prockop), (154) 196
- Endometrial protein
  - Uteroglobin: A hormone-sensitive --- involved in blastocyst development (Beier) (160) 289
- Endonuclease
  - Nucleases of yeast. II. Purification, properties and specificity of an --- from yeast (Lee, Nakao, Bock)(151) 126
- Endopeptidase
  - --- activity isolated from Bacillus megaterium (Millet, Acher)(151) 302
- Endoplasmic reticulum
  - Characterization of RNA from the smooth --- of rat liver (King, Fitschen)(155) 32
- Endoplasmic reticulum
  - Hepatic --- and cholesterol biosynthesis (Pascaud, Auliac, Pascaud)(150) 326
- Endoplasmic reticulum
  - Infrared spectra of plasma membrane and --- of Ehrlich ascites carcinoma (Wallach, Zahler)(150) 186
- Endoplasmic reticulum
  - RNA turnover in free and --- bound ribosomes from rat liver (Murty, Hallinan) (157) 414
- Endoplasmic reticulum
  - Use of radioactive choline as a label for microsomal membranes. I. Selectivity of label for --- and specificity for lecithin (Nagley, Hallinan)(163) 218
- Energy coupling
  - Oligomycin-like inhibition of yeast respiration by N,N'-dicyclohexylcarbodiimide and the nature of --- in intact yeast cells (Kováč, Galeotti, Hess)(153) 715
- Energy metabolism
  - Release reaction and --- in blood platelets with special reference to the burst in oxygen uptake (Mürer)(162) 320
- Energy production
  - Role of glycolysis in --- in the isolated skin of the brown frog (Rana temporaria, L.) (Kristensen, Schousboe)(153) 132
- Energy transfer
  - --- and electron-transfer systems in algal photosynthesis. II. Oxidation-reduction reactions of two cytochromes and interactions of two photochemical systems in red algae (Nishimura)(153) 838
- Energy transfer
  - --- in oligotyrosyl compounds: Fluorescence quenching as a function of the phenolic hydroxyl groups (Knopp, Longworth) (154) 436
- Energy transport
  - Nature of electron transport and --- in mitochondria. II. Multiple activation of mitochondrial respiration (Nijs)(153) 70
- Enterotoxin B
  - Method for preparing small quantities of ^{14}C-labelled staphylococcal --- (Bowden) (168) 150
- Enzymatic oxidations
  - Kinetic isotope effects in --- of D-[1-H] glucose and D-[1-^{2}H] glucose (Hauge, Foulds, Bentley)(159) 398
- Enzyme activities
  - Changes of --- with diet and thyroxine during postnatal development of the rat (Hémon, Berbey)(170) 235
- Enzyme kinetics
  - --- and substrate reactions in single living cells (Kohen, Kohen, Thorell)(167) 635
- Epidermal growth factor
  - ---. III. Stimulation of polysome formation in chick embryo epidermis (Cohen, Stastny) (166) 427
- Epinephrine
  - Synthesis and identification of the --- metabolite 4-hydroxy-3-methoxy-DL-mandelic acid (Goodman et al.)(156) 364
- Epithelial cells
  - Studies on the organization of the brush border in intestinal ---. V. Subfractionation of enzymatic activities of the microvillus membrane (Eichholz)(163) 101
- Epithelial cell brush borders
  - Presence of K$^+$-dependent phosphatase in intestinal --- isolated by a new method (Boyd, Parsons, Thomas)(150) 723
- Equilibrium density gradients
  - Calculation of --- (Jeffrey)(158) 295
- Erythrocuprein
  - Ultraviolet fluorescence of human --- (Bannister, Salisbury, Wood)(168) 392
- Erythrocytes
  - Alkali cation-activated AMP deaminase of ---: Some properties of membrane-bound enzyme (Rao, Hara, Askari)(151) 651
- Erythrocytes
  - Amino sugar metabolism in --- (Kornfeld, Noll)(170) 77
- Erythrocyte
  - Deoxyribonucleoside metabolism by the human --- (Bartlett)(156) 254
- Erythrocytes
  - 2, 3-Diphosphoglycerate metabolism and glycolysis in human --- under the influence of dipyridamole and inorganic sulphur compounds (Duhm, Deuticke, Gerlach) (170) 452
- Erythrocyte
  - Effects of ATP and Na$^+$ on K$^+$-activated phosphatase from --- cell membranes (Rega, Garrahan, Pouchan)(150) 742
- Erythrocytes
  - Effects of high electric fields on microor-

  - ganisms. III. Lysis of --- and protoplasts (Sale, Hamilton)(163) 37
- Erythrocytes
  - Effect of membrane modification of human --- by enzyme treatment on their partition in aqueous dextran-polyethylene glycol two-phase systems (Walter, Coyle) (165) 540
- Erythrocytes
  - Factors affecting the synthesis of 2, 3-diphosphoglycerate in haemolysates of human --- (Forstner, Fortier, Lionetti)(158) 317
- Erythrocytes
  - Factors in the partition of --- in aqueous dextran-polyethylene glycol two-phase systems (Walter, Krob, Garza)(165) 507
- Erythrocytes
  - Glucose diphosphate and mannose diphosphates in erythrocytes (Bartlett) (156) 231
- Erythrocytes
  - Influence of conductivity on the electrophoretic mobility of --- (Carstensen et al.) (156) 394
- Erythrocytes
  - Kinetics of haemolysis of human --- in hypotonic solutions of glucose (Good, Rose) (163) 483
- Erythrocytes
  - Kinetics of malonamide-induced haemolysis of mammalian ---. I. The Arrhenius activation parameters (Coldman, Good) (150) 194
- Erythrocytes
  - Kinetics of malonamide-induced haemolysis of mammalian ---. II. The Eyring activation parameters (Coldman, Good)(150) 206
- Erythrocytes
  - Phosphate release from human --- (Glader, Omachi)(163) 30
- Erythrocyte
  - Phoshorus compounds in the human --- (Bartlett)(156) 211
- Erythrocyte
  - Ribonucleoside metabolism by the human --- (Bartlett, Bucolo)(156) 240
- Erythrocytes
  - Role of cellular P_i in P_i transport and metabolism in human --- (Glader, Omachi) (150) 524
- Erythrocytes
  - Separation of porphobilinogen deaminase and uroporphyrinogen III cosynthetase from human --- (Stevens, Frydman, Frydman)(158) 496
- Erythrocytes
  - Transformation and restoration of biconcave shape of human --- induced by amphiphilic agents and changes of ionic environment (Deuticke)(163) 494
- Erythrocyte ghost
  - Enhancing action of synthetic and natural basic polypeptides on --- phospholipid hydrolysis by phospholipase A (Klibansky et al.)(150) 15
- Erythrocyte ghosts
  - Nuclear resonance studies of --- at 220 Mcycles/sec (Kamat, Chapman)(163) 411
- Erythrocyte ghosts
  - Release of a macromolecular protein component from human --- (Harris)(150) 534
- Erythrocyte lipids
  - Metabolism in vivo of bovine --- (Winterbourn, Batt)(152) 412
- Erythrocyte membranes
  - ---: Effects of sonication (Rosenberg, McIntosh)(163) 285
- Erythrocyte membranes
  - Protein patterns of --- from different mammalian species (Zwaal, Van Deenen) (163) 44
- Erythrocyte membranes
  - Solubilization of human --- by n-pentanol (Zwaal, Van Deenen)(150) 323
- Erythrocyte membranes
  - Vitamin E deficiency and fatty acid turnover in --- (Oliveira, Nason)(150) 319
- Erythroid cells
  - Globins and their synthesis in the --- of the chick embryo (D'Amelio, Constantino) (155) 614
- Erythromycin
  - Cross resistance of Escherichia coli B ribosomes to inhibition of the puromycin reaction by ---, spiramycin and chloramphenicol (Černá, Rychlík)(157) 436
- Erythromycin A
  - Non-identity of the site of action of --- and chloramphenicol on Bacillus subtilis ribosomes (Oleinick, Wilhelm, Corcoran) (155) 290
- Erythropoietin
  - Inactivation of --- by Koshland's tryptophan reagent and by membrane filtration (Lowy, Keighley)(160) 413
- Escherichia coli
  - Formation of D_g-1-amino-2-propanol by a highly purified enzyme from --- (Dekker, Swain)(158) 306
- Escherichia coli
  - Hydroxymethylation of the benzene ring. IV. p-Hydroxymethyl-L-phenylalanine, a naturally occurring amino acid in ---: Identification and biochemical properties (Sloane, Smith)(158) 394
- Escherichia coli
  - Polyamine-inorganic cation interaction with ribosomes of --- (Norton, Erdmann, Herbst)(155) 293
- Esche ichia coli
  - Studies on (Na$^+$-K$^+$)-activated ATPase. XIX. Occurrence and properties of a (Na$^+$-K$^+$)-activated ATPase in --- (Hafkenscheid, Bonting)(151) 204
- Essential fatty acid
  - Alterations in the molecular species of rat-liver lecithin by corn-oil feeding to --- -deficient rats as a function of time (Van Golde, Pieterson, Van Deenen)(152) 84
- Essential fatty acids
  - Distribution of odd-numbered --- and other polyenoic fatty acids in rat liver lipids (Sand, Schlenk)(164) 598
- Essential fatty acids
  - Fatty livers in rats deficient in --- (Sinclair, Collins)(152) 498
- Esterases
  - Comparative study of the multiplicity of mammalian --- (Holmes, Masters)(151) 147
- Esterases
  - Ontogeny of pig and duck --- (Holmes, Masters)(159) 81
- Esterases
  - --- of the pea (Pisum sativum L.) (Norgaard, Montgomery)(151) 587
- Esterase determinations
  - Use of naphthyl esters as substrates in --- (Augustinsson)(159) 197
- Esterolytic activity
  - Characterization of tissue lipolytic activity

and --- cleaving full and partial glycerides (Biale, Gorin, Shafrir)(152) 28
Estradiol
Differential effects of etiocholanolone on phospholipid–cholesterol structures containing either testosterone or --- (Sessa, Weissmann)(150) 173
Estradiol
Effects of --- and testosterone on the incorporation and distribution of [Me-^{14}C]methionine methyl in rat liver lecithins (Lyman et al.)(152) 197
17β-Estradiol binding
Influence of 20-methylcholanthrene on --- to 9.5-S receptor molecule from rat uterus (Hierowski, Madoń)(170) 425
Estradiol induction
--- of pyruvate kinase in the rat uterus (Jiménex de Asúa, Rozengurt, Carminatti) (170) 254
Estrogen
Amino acid transport into the --- -primed uterus. I. General characteristics of the uptake in vitro (Riggs, Pan, Feng)(150) 92
Estrogen
--- -induced calcium-binding protein in Xenopus laevis (Munday et al.)(166) 748
Estrogens
Role of --- in the regulation of RNA polymerase in surviving rat uteri (Nicolette, LeMahieu, Mueller)(166) 403
Estrogen biosynthesis
Studies on the mechanism of ---. V. Stereochemical comparison of aromatization in placenta and microbiological systems (Brodie, Possanza, Townsley)(152) 770
Estrogen metabolism
Steroid epimerase – a new enzyme of --- (Dahm, Lindlaw, Breuer)(159) 377
Estrogen regulation
Studies on --- of cholesterol biosynthesis in rat liver microsomes (Mukherjee, Bhose) (164) 357
Estrone
[11α-^{3}H] Cortisol as hydrogen donor in the reduction of androstendione and --- in rat liver tissue (Wenzel)(152) 431
Ethanol
Effect of --- on the concentrations of solvolyzable plasma steroids (Cronholm, Sjövall) (152) 233
Ethanolamine
Specificity for incorporation of choline and --- into rat liver microsomal lecithins (Rytter, Miller, Cornatzer)(152) 418
Ethanolamine deaminase
Coenzyme B_{12} as hydrogen carrier in the --- reaction (Babior)(167) 456
Ethanolamine glycerophosphatide
Mono- and dimethyl phosphatidates from different subtypes of choline glycerophosphatide and --- (Renkonen)(152) 114
Ether lipids
Alk-1-enyl --- and alkyl ether lipids of bovine heart muscle (Schmid, Takahashi) (164) 141
Ethionine
Effects of --- on the structure of liver triglycerides (Sugano et al.)(152) 781
Ethionine
--- -induced inhibition of protein synthesis in male and female rats. Lack of effect on intestinal mucosa (Schlunk, Longnecker, Lombardi)(158) 425
N-Ethylmaleimide
Interaction of --- and ACTH on isolated fat cells (George, Palmer, McCoy)(170) 213
Ethyl methanesulphonate
DNA repair after --- treatment of Escherichia coli (Verly et al.)(161) 548
Ethyl-p-nitrophenyl-ethylphosphonate
Hydrolysis of diethyl-p-nitrophenylphosphate and --- by human sera (Škrinjarić-Špoljar, Reiner)(165) 289
Etiocholanolone
Differential effects of --- on phospholipid-- cholesterol structures containing either testosterone or estradiol (Sessa, Weissmann)(150) 173
Euglena chloroplasts
Measurements of s – ρ coordinates during the development of --- (Knight, Price) (158) 283
Euglena gracilis
Properties of ribosomal RNA obtained from a bleached --- (Portier, Nigon) (169) 540
Euglena gracilis RNA
Sucrose density-gradient analysis of --- isolated with Macaloid (Schuit, Buetlow) (166) 702
Eviscerated rats
Effects of L-carnitine on utilization bodies and glucose in --- and in nephrectomized rats (Söling, Appels)(158) 162
Exonuclease
Studies on acid hydrolases. IV. Isolation and characterization of spleen --- (Bernardi, Bernardi)(155) 360
Exonuclease activity
--- in rat-liver cell sap (Hunter, Korner) (169) 488
Exotoxin
Inhibition of DNA-dependent RNA polymerase by the --- of Bacillus thuringiensis var. gelechiae (Šebesta, Horská)(169) 281
Extracellular enzyme
Selective inhibition of --- synthesis by removal of cell wall from Bacillus subtilis (May, Elliott)(166) 532
Extracellular protease
Characteristics of --- formation by Bacillus subtilis and its control by amino acid repression (May, Elliott)(157) 607
Extranucleolar nuclear RNA
Studies on the sedimentation properties of nuclear RNA, nucleolar RNA and --- (Fujisawa, Muramatsu)(169) 175
Eye
Phospholipids in tissue of the ---. I. Isolation, characterization and quantitative analysis by two-dimensional thin-layer chromatography of diacyl and vinyl ether phospholipids (Broekhuyse)(152) 307
Eye
Phospholipids in the tissues of the ---. II. Composition and incorporation of $^{32}P_i$ of phospholipids of normal rat and calf lens (Broekhuyse, Veerkamp)(152) 316
Eyring activation
Kinetics of malonamide-induced haemolysis of mammalian erythrocytes. II. The --- parameters (Coldman, Good)(150) 206

F

Fasciola hepatica
Phosphoenolpyruvate metabolism and pyruvate metabolism in the adult liver fluke, --- (Prichard, Schofield)(170) 63

Fatty acids
Formation of monohydroxy-polyenic --- from lipid peroxides by a glutathione peroxidase (Christophersen)(164) 35

Fatty acids
Fatty livers in rats deficient in essential --- (Sinclair, Collins)(152) 498

Fatty acids
Fatty acid synthesis in mitóchondria. Elongation of short-chain --- and formation of unsaturated long-chain --- (Christ)(152) 50

Fatty acids
Distribution of trans-unsaturated --- in milk fat (Woodrow, DeMan)(152) 472

Fatty acid
Absorption of bile salt and --- by hamster small intestine (Gordon, Kern Jr.)(152) 372

Fat cells
Effect of diabetes on glucose metabolism in isolated --- (Chiappe de Cingolani, Brenner)(152) 217

Fatty acids
Fractionation of unaltered phosphatidyl [1,2-^{14}C$_2$]ethanolamines according to the degree of unsaturation of their predominant --- (Hopkins, Sheehan, Lyman) (164) 272

Fatty acids
Function of growth factors for rumen microorganisms. II. Metabolic fate of incorporated fatty acids in Selenomonas ruminantium (Kanegasaki, Takahashi)(152) 40

Fatty acids
Hydrolysis of synthetic cholesterol esters containing trans --- (Sgoutas)(164) 317

Fatty acids
Incorporation of glucose variously labelled with ^{14}C into ---. A contribution to the study of the oxydative pathway of glucose (Rous, Lüthi, Favarger)(152) 454

Fatty acids
Incorporation of various hydrogen precursors into the --- of the living mouse (Rous et al.)(152) 462

Fatty acids
Influence of chain length on the dehydrogenation of saturated --- (Howling, Moris, James)(152) 224

Fatty acids
Monoenoic and docosahexaenoic --- of a heterotrophic dinoflagellate (Harrington, Holz Jr.)(164) 137

Fatty acid
α-Oxidation of a β-methyl-substituted --- in guinea-pig liver mitochondria (Stokke) (152) 213

Fatty acids
Positional distribution of --- in liver lecithin of rats as a function of dietary linoleate or linolenate (Pudelkewicz, Holman) (152) 340

Fatty acid
Production of unesterified --- in brain (Lunt, Rowe)(152) 681

Fatty acid
Short-chain --- activation in rat liver. A new assay procedure for the enzymes and studies on their intracellular localization (Aas, Bremer)(164) 157

Fatty acids
Stability of ^{14}C-labelled --- during prolonged storage (Mangold, Sand)(164) 124

Fatty acids
Study of endogenous --- of the lymphatic chylomicron triglycerides in the rat after administration of various mixed labelled triglycerides (Boucrot, Clément)(164) 558

Fatty acid-activating enzymes
Distribution of long-chain --- in rat tissues (Pande, Mead)(152) 636

Fatty acid biosynthesis
--- IV. Properties of acetyl-CoA carboxylase in lactating-rabbit mammary gland (Easter, Dils)(152) 653

Fatty acid composition
Specificity of --- of mitochondrial membrane phospholipids (Huet, Lévy, Pascaud) (150) 521

Fatty acid metabolism
Pituitary peptides with direct action on the carbohydrate metabolism and --- (Bornstein et al.)(156) 31

Fatty acid ω-oxidation
Participation of the microsomal electron transport system involving cytochrome P-450 in --- (Wada et al.)(162) 518

Fatty acid synthesis
--- by chain elongation in rat-liver mitochondria (Quagliariello, Landriscina, Coratelli)(164) 12

Fatty acid synthesis
Control of --- in mitochondrial membranes (Howard Jr.)(164) 448

Fatty acid synthesis
Effect of alloxan diabetes on polyenoic --- by retinal tissue (Futterman, Rollins, Vacano)(164) 433

Fatty acid synthesis
Effect of corticotropin on adrenal --- (Robertson, Reddy)(164) 126

Fatty acid synthesis
Mechanism of malonyl-CoA-independent ---. I. The mechanism of elongation of long-chain fatty acids by acetyl-CoA (Seubert et al.)(154) 498

Fatty acid synthesis
--- in mitochondria. Elongation of short-chain fatty acids and formation of unsaturated long-chain fatty acids (Christ) (152) 50

Fatty acid turnover
Vitamin E deficiency and --- in erythrocyte membranes (Oliveira, Nason)(150) 319

Fatty livers
--- in rats deficient in essential fatty acids (Sinclair, Collins)(152) 498

Ferredoxin
--- -dependent NAD reduction with hydrogen gas by subcellular preparations from the photosynthetic bacterium, Chromatium (Buchanan, Bachofen)(162) 607

Ferredoxin

Oxidation-reduction potentials and stoichiometry of electron transfer in --- (Tagawa, Arnon)(153) 602
Ferricyanide
Electron paramagnetic resonance signal produced by --- in photosynthetic plant materials (Weaver)(162) 286
Ferricytochrome c
Reduction of --- during the enzymic oxidation of DOPA (Kertesz)(167) 250
Ferrimyoglobin
Paramagnetic anisotropy measurements on acid --- and ferrimyoglobin fluoride (Uenoyama et al.)(160) 159
Ferrimyoglobin azide
Analysis of a thermal equilibrium phenomenon between high-spin and low-spin states of --- (Iizuka, Kotani)(154) 417
Ferritin
Rapid isolation of --- by means of ultracentrifugation (Penders, De Rooij-Dijk, Leijnse) (168) 588
Ferritin
Sucrose gradient sedimentation study of ^{59}Fe-labelled --- in an extract of HeLa cells (Miller)(155) 262
Ferrochelatase activity
--- of yeast mitochondria (Labbe, Volland, Chaix)(159) 527
Ferrohaem
Complexes of phenyldiazene (phenyldiimide) with deoxyhaemoglobin and --- (Huang, Kosower)(165) 483
Ferrous ion
Action of oxygenated water on DNA in the presence of --- and light (Schweitz)(166) 720
Fetuin
Fetal α-globulin of bovine serum differing from --- (Kithier, Masopust, Rádl)(160) 135
Fibrin
Fibrinogen- --- interaction (Belitser, Varetskaja, Malneva)(154) 367
Fibrinogen
Amino acid sequence of the N-terminal part of γ-chain in human --- (Iwanaga et al.) (160) 280
Fibrinogen
Characterization of clottable proteins accompanying bovine --- by determination of the terminal amino groups (Hörmann, Rodriguez Fernández)(168) 157
Fibrinogen
Differences between plasmic and tryptic digests of human S-sulfo- --- (Wallén, Iwanaga)(154) 414
Fibrinogen
--- -fibrin interaction (Belitser, Varetskaja, Malneva)(154) 367
Fibrinogen
Measurement of absolute and relative synthesis rates of --- in vivo (Koj)(165) 97
Fibrinogen
Nature of the high molecular weight fraction of fibrinolytic digests of human --- (Jamieson, Gaffney Jr.)(154) 96
Fibroin
Species specificity of the conformation of silk --- in solution (Iizuka)(160) 454
Filipin
Effect of cholesterol incorporation on the sensitivity of liposomes to the polyene antibiotic, --- (Kinsky et al.)(152) 174
Filipin
Effect of --- on rat liver and yeast mitochondria (Balcavage et al.)(162) 525
Flavin
Photoreduction of amino-acid oxidases in the presence of free --- and the effect of urea (Koster, Veeger, McCormick)(153) 724
Flavin-adenine dinucleotide
Rapid resolution of --- and its mononucleotides on cellulose layers by aqueous ammonium acetate (Harris)(158) 308
Flavin free radicals
Electron-nuclear double resonance from --- on NADPH·dehydrogenase ('old yellow enzyme') (Ehrenberg, Eriksson, Hyde) (167) 482
Flavin nucleotides
Enzymatic nitrate reduction with --- reduced by a new chloroplast NADH-specific diaphorase (Paneque et al.)(162) 149
Flavoprotein
Alcohol oxidase, a --- from several Basidiomycetes species. Crystallization by fractional precipitation with polyethylene glycol (Janssen, Ruelius)(151) 330
Fluorescence
Photochemistry of polynucleotides. II. Mononucleotide and dinucleotide --- at ordinary temperatures (Leng, Pochon, Michelson)(169) 338
Fluorescence
--- and protein structure. XIII. Further effects of side-chain groups (Russell, Cowgill) (154) 231
Fluorescence assay
--- for phenylalanine transfer RNA (Yoshikami et al.)(166) 714
Fluorescence spectrum
Low-temperature --- of blue-green and red algae (Goedheer)(153) 903
Fluoride
Irreversible inactivation of (Na^+-K^+)-dependent ATPase and K^+-dependent phosphatase by --- (Yoshida et al.)(150) 162
Fluoroacetate
Studies on the biochemical basis of susceptibility and resistance of the housefly to --- (Zahavi, Tahori, Mager)(153) 787
Fluoroacetyl-CoA
--- as a substrate for malate synthase (Powell, Beevers)(151) 708
5-Fluorouracil
Effects of cycloheximide and --- on the synthesis of RNA in yeast (Mayo, Andrean, De Kloet)(169) 297
Folate coenzymes
Interrelationships between folic acid and biotin: Effect of biotin on the biosynthesis of --- (Pasquali, Landi, Marchetti)(165) 561
Folic acid
Interrelationships between --- and biotin: Effect of biotin on the biosynthesis of folate coenzymes (Pasquali, Landi, Marchetti) (165) 561
Follicle-stimulating hormone
Isolation and characterization of ovine --- (Cahill et al.)(154) 40
Follicle-stimulating hormone
Study of immunological properties of ovine --- in the course of its purification (Baron, Kaminski, Jutisz)(168) 555
Follicle-stimulating hormone
Terminal amino acid residues of ovine --- (Cahill, Li)(168) 367
Formaldehyde
Irreversible effects of --- on DNA (Collins, Guild)(157) 107
Formycin triphosphate

Synthesis of --- and its incorporation into ribopolynucleotide by DNA-dependent RNA polymerase (Ikehara et al.)(155) 82

Formylation

Chain initiation during polypeptide synthesis in a cell-free bacterial system programmed with plan viral messengers. I. Dependence on --- and ribosomal factors (Reinecke et al.)(157) 566

N-Formylmethionine

Chain initiation during polypeptide synthesis in cell-free bacterial systems programmed with viral messengers. II. The role of --- (Hoogendam et al.)(157) 579

N-Formyl-methionyl-puromycin

Formation of --- by intact cells of four different bacteria and a blue-green alga (Bachmayer, Kreil)(169) 95

Formyl residues

Studies on the requirement for --- in the synthesis of bacteriophage T14 proteins (Klein et al.)(169) 543

5-Formyluracil

Formation of --- by cell-free preparations from Neurospora crassa (Abbott, Dragila, McCroskey)(169) 1

Fructose

Effect of intravenous --- and glucose on the hepatic α-glycerophosphate concentration in the rat (Zakim, Herman)(165) 374

Fructose-1,6-diphosphatase

Desensitization of kidney --- by acetic anhydride (Marcus)(151) 312

Fructose-1,6-diphosphatase

Inhibition of spinach chloroplast --- by $MgATP^{2-}$, $MgADP^{-}$, and magnesium pyrophosphate ($MgP_2O_7^{2-}$) (Morris)(162) 462

Fructose-1,6-diphosphatase

--- of mouse Ehrlich ascites tumour and its comparison with the enzymes of liver and skeletal muscle of the mouse (Sato, Tsiuki)(159) 130

Fructose-1,6-diphosphate aldolase

Ontogeny of mammalian --- (Masters)(167) 161

Fructose diphosphate aldolases

Purification and characterization of the --- from Anacystis nidulans and Saprospira thermalis (Willard, Gibbs)(151) 438

Fructose utilization

Effects of Bacillus subtilis protease, Type VIII (subtilopeptidase A) on isolated adipose cells. --- and its inhibition by avenaciolide, piericidin A and puromycin (Kuo)(165) 208

L-Fucose-binding proteins

Separation of three --- of Lotus tetragonolobus (Kalb)(168) 532

Fusarium

D-Amino-acid oxidase in --- (Chiari)(165) 127

G

[1-^{14}C]Galactitol
  Metabolic fate of --- in mammalian tissue (Weinstein, Segal)(156) 9
Galactose
  Effect of an aldose reductase inhibitor on the --- -exposed rabbit lens (Kinoshita et al.) (158) 472
D-[^{14}C]Galactose
  Incorporation of --- and N-[^{3}H]acetylneuraminic acid into glycoprotein by particles from bovine retina (O'Brien, Muellenberg) (158) 189
Galactosidase
  Properties of cerebroside --- (Bowen, Radin)(152) 599
Galactosidase
  Purification of cerebroside --- from rat brain (Bowen, Radin)(152) 587
α-Galactosidase
  Separation of an --- from rat uterus (Coleman)(159) 192
β-Galactosidase
  Catabolite repression of the synthesis of --- in Proteus mirabilis F-lac (Colby Jr., Martin, Hu)(157) 159
β-Galactosidase
  Effects of alkylating agents on the induced synthesis of --- by Escherichia coli B_{S-1} (Venitt, Brookes, Lawley)(155) 521
β-Galactosidase
  Identity of β-glucosidase, β-xylosidase and one of the --- activities in human liver when assayed with 4-methylumbelliferyl-β-D-glycosides. Studies in cases of Gaucher's disease (Öckerman)(165) 59
β-Galactosidase
  Isolation and characterization of --- from Saccharomyces lactis (Bierman, Glantz) (167) 373
β-Galactosidase
  Purification and comparison of the --- synthesized by Escherichia coli F-lac$^+$ and Proteus mirabilis F-lac$^+$ (Colby Jr., Hu)(157) 167
β-Galactosidase
  Regulation of the synthesis of --- in Proteus mirabilis F-lac (Colby Jr., Hu)(157) 149
Gall-bladder epithelium
  Effects of pH and polyvalent cations on the selective permeability of --- to monovalent-ions (Wright, Diamond)(163) 57
Gallocyanine
  Colorimetric assay of acetylcholine by --- (Steinhart)(158) 171
Gametic differentiation
  Protein turnover and macromolecular synthesis during growth and --- in Chlamydomonas reinhardtii (Jones, Kates, Keller) (157) 589
Gangliosides
  Enzymatic hydrolysis of sphingolipids. VII. Hydrolysis of --- by a neuraminidase from calf brain (Leibovitz, Gatt)(152) 136
Ganglioside
  Evidence for a specific --- fraction closely associated with myelin (Suzuki, Poduslo, Poduslo)(152) 576
Gaucher's disease
  Identity of β-glucosidase, β-xylosidase and one of the β-galactosidase activities in human liver when assayed with 4-methylumbelliferyl-β-D-glycosides. Studies in cases of --- (Öckerman)(165) 59
Gel filtration
  --- of deoxyribonucleoprotein on agarose (Loeb)(157) 424
Genetic suppression
  Enzymic basis for a ---: Accumulation and deacylation of N-acetylglutamic γ-semialdehyde in enterobacterial mutants (Itikawa, Baumberg, Vogel)(159) 547
Genetic transcription
  --- in asporogenous mutants of Bacillus subtilis (Yamagishi, Takahashi)(155) 150
Genetic transcription
  Effect of cortisol on --- in rat-liver chromatin (Stackhouse, Chetsanga, Tan)(155) 159
Genetic transformation
  --- of the bacteriophage T4. I. An outline and some properties of the phage transformation system (Veldhuisen, Poelman, Cohen)(161) 94
Genetic transformation
  --- of the bacteriophage T4. II. Biological activity of DNA fragments (Veldhuisen, Poelman, Cohen)(161) 109
Genetic transformation
  --- of the bacteriophage T4. III. Influence of ultraviolet irradiation and nitrous acid on the biological activity of isolated T4 DNA (Veldhuisen, Poelman, Cohen)(161) 115
Germ-free animals
  Absence of gastric urease in --- (Delluva, Markley, Davies)(151) 646
Germination
  Studies on the conidia of Aspergillus oryzae. VII. Development of protein synthesizing activity during --- (Horikoshi, Ikeda) (166) 505
Giant nerve cells
  Stability of electrical coupling in leech ---: Divalent cations, propionate ions, tonicity and pH (Payton, Loewenstein)(150) 156
Gibberellic acid
  Immediate effects of --- on membrane transport in young pea seedlings (Lüttge, Bauer, Köhler)(150) 452
Gibberellic acid
  Influence of --- on nucleic acid synthesis in dwarf pea internodes (Broughton)(155) 308
Gliadin
  Aminoethylation and fractionation of glutenin: Evidence of differences from --- (Rothfus, Crow)(160) 404
Gliadin
  Separation and study of the antigenic properties of peptides obtained by degradation of --- by different preparations of alkaline phosphatase (Escribano, Daquo) (160) 69
Globin
  Association-dissociation equilibria in human --- solutions (Hrkal, Vodrážka) (160) 269
Globin
  Carbamylation of --- in electrophoresis and chromatography in the presence of

urea (Čejka, Vodrážka, Salák) (154) 589
Globins
--- and their synthesis in the erythroid cells of the chick embryo (D'Amelio, Constantino) (155) 614
Globin synthesis
Inhibition of haem synthesis and --- by cobalt in rabbit reticulocytes and bone marrow (Schulman, Jobe) (169) 241
α-Globulin
Fetal --- of bovine serum differing from fetuin (Kithier, Masopust, Rádl) (160) 135
γG-Globulin
Studies on low molecular weight peptides derived from human ---. Identification of rheumatoid factor-reactive peptides in proteolytic digests (Henney, Jefferis, Stanworth) (154) 295
γG-Globulin
Variations in the carbohydrate content of rabbit --- (Blacklow, Marshall) (165) 179
Glucàgon
Effects of --- and fasting on acetate metabolism in perfused rat liver (Regen, Terrell) (170) 95
α(1-3) Glucan
Occurrence of --- in Cryptococcus, Schizosaccharomyces and Polyporus species, and its hydrolysis by a Streptomyces culture filtrate lysing cell walls of Cryptococcus (Bacon et al.) (158) 313
Glucocorticoids
Regulatory effect of --- on ornithine aminotransferase and serine dehydratase in rat liver (Peraino) (165) 108
Glucosamine
Conversion of --- to glucose by leucocytes cultures (Kornfeld, Gregory) (158) 468
Glucosamine
Glucuronic acid- and --- -containing oligosaccharides from the heparin-protein linkage region (Lindahl) (156) 203
[1-^{14}C]Glucosamine
Incorporation of --- by rat intestinal microvillus membrane (Forstner) (150) 736
Glucosamine synthesis
--- in mast cells (Danishefsky, Deutsch) (151) 529
Glucose
Absence of --- in Ehrlich ascites tumour cells and fluid (Nakamura, Hosoda) (158) 212
Glucose
Amino acid transport by the small intestine of the rat. Effects of --- on transintestinal proline transport and valine transport (Munck) (150) 82
Glucose
Conversion of glucosamine to --- by leucocytes cultures (Kornfeld, Gregory) (158) 468
Glucose
Effects of L-carnitine on utilization of ketone bodies and --- in eviscerated rats and in nephrectomized rats (Söling, Appels) (158) 162
Glucose
Effect of --- and insulin in vitro on the uptake of triglyceride and on lipoprotein lipase activity in fat pads from normal fed rats (Austin, Nestel) (164) 59
Glucose
Effect of intravenous fructose and --- on the hepatic α-glycerophosphate concentration in the rat (Zakim, Herman) (165) 374
Glucose
Effects of peptides with oxytocic activity on the metabolism of --- by adipose tissue (Migliorini, Linder, Camargo) (158) 160
Glucose
Glycolipids containing --- and uronic acids in Pseudomonas species (Wilkinson) (152) 227
Glucose
Incorporation of ^{3}H and ^{14}C into plasma lactate following administration of [6-^{3}H-^{14}C] --- (Dunn, Chenoweth, Schaeffer) (165) 170
Glucose
Incorporation of --- variously labelled with ^{14}C into fatty acids. A contribution to the study of the oxidative pathway of glucose (Rous, Lüthi, Favarger) (152) 454
Glucose
Interrelationships between liver composition, plasma --- and ketones, and hepatic acetyl-CoA and citric acid during prolonged starvation in the male rat (Herrera, Freinkel) (170) 244
Glucose
Loss of viability and respiration of Bacillus subtilis grown in peptone medium supplemented with --- (Baillie, Holms) (170) 442
Glucose
--- as a regulator of glycogen phosphorylase in rat diaphragm. I. Effect of glucose and related compounds on phosphorylase and glycogen levels (Holmes, Mansour) (156) 266
Glucose
--- as a regulator of glycogen phosphorylase in rat diaphragm. II. Effect of glucose and related compounds on phosphorylase phosphatase (Holmes, Mansour) (156) 275
[^{14}C]Glucose
Incorporation of specifically labelled --- into herpes simplex DNA (Fisher, Fisher Jr.) (157) 634
[6-^{14}C]Glucose
Oxidation of --- to ^{14}CO$_2$ by the pentose cycle in Ehrlich ascites tumour cells (Sato, Suzuki, Tsuiki) (165) 189
D-[1-^{2}H]Glucose
Kinetic isotope effects in enzymatic oxidations of D-[1-H]glucose and --- (Hauge, Foulds, Bentley) (159) 398
L-Glucose
Inclusion of --- within the specificity limits of the active sugar transport system of hamster small intestine (Caspary, Crane) (163) 395
Glucose diphosphate
--- and mannose diphosphates in erythrocytes (Bartlett) (156) 231
Glucose metabolism
Effect of aldosterone on --- in toad bladder (Kirchberger et al.) (165) 22
Glucose metabolism
Effect of diabetes on --- in isolated fat cells (Chiappe de Cingolani, Brenner) (152) 217
Glucose metabolism
Relationship between the transport of glucose and cations across cell membranes in isolated tissues. III. Effect of Na^{+} and hyperosmolarity on --- and insulin responsiveness in isolated rat hemidiaphragm (Clausen) (150) 56
Glucose permeability
Effects of temperature and cholesterol on the --- of liposomes prepared with natural and synthetic lecithins (Demel et al.)

(150) 655
Glucose permeability
--- of lipid bilayer membranes (Wood, Wirth Jr., Morgan)(163) 171
Glucose-6-phosphatase
Human liver ---: Characteristics of the detergent-solubilized enzyme (Collipp, Chen, Halle)(167) 141
Glucose-6-phosphatase activity
Nature of the increase in liver microsomal --- during the early stages of alloxan-induced diabetes (Jakobsson, Dallner)(165) 380
Glucose 1-phosphate
Temperature effects on the acid hydrolysis of --- and urease hydrolysis of urea (Miller et al.)(167) 607
Glucose-6-phosphate dehydrogenase
Effect of some metabolites on --- activity in loach embryos (Yurowitzki, Milman) (151) 270
Glucose transport
Relationship between the --- and cation transport across cell membranes in isolated tissues. III. Effect of Na$^+$ and hyperosmolarity on glucose metabolism and insulin responsiveness in isolated rat hemidiaphragm (Clausen)(150) 56
Glucose transport
Relationship between the --- and cation transport across cell membranes in isolated tissues. IV. The "insulin-like" effect of Li$^+$ (Clausen)(150) 66
β-Glucosidase
Identity of ---, β-xylosidase and one of the β-galactosidase activities in human liver when assayed with 4-methylumbelliferyl-β-D-glycosides. Studies in cases of Gaucher's disease (Öckerman)(165) 59
β-Glucosidase
Labelling of the active centre of a --- (Legler)(151) 728
β-Glucosidase
Rat-liver lysosomal ---: A membrane enzyme (Beck, Tappel)(151) 159
Glucuronic acid
--- - and glucosamine-containing oligosaccharides from heparin-protein linkage region (Lindahl)(156) 203
β-Glucuronidase
Purification and properties of beef heart --- (Romeo, De Bernard)(159) 194
Glutamate
Isolation of 5,6-dimethylbezimidazolyl cobamide coenzyme as a cofactor for --- formation from Acetobacter suboxydans (Kato, Hayashi, Kamikubo)(165) 233
Glutamate decarboxylase
Electron-microscopic investigation of Escherichia coli --- (Tikhonenko, Sukhareva, Braunstein)(167) 476
Glutamate dehydrogenase
Effect of 2-oxoglutarate on the catalytic activity and stability of --- (Eisenkraft, Veeger)(167) 227
Glutamate oxidation
Nature of malonate-insensitive pyruvate oxidation and --- by heart sarcosomes (Davis)(162) 1
Glutamic acid
Role of --- as a precursor of collagen proline and hydroxyproline (Ishibashi, Ide, Tsurufuji)(165) 296
$[^{14}C]$Glutamic acid
Studies on the incorporation of radioactivity from --- by soluble extracts of thyroid particles (Soffer)(155) 241
Glutaminase
Studies on two --- systems from rat kidney (Lamar Jr.)(151) 188
Glutamine synthetase
Induction of --- in chick embryo retina: Effects of serum and steroid structure (Reif-Lehrer)(170) 263
Glutamine synthetase
Induction of --- by cortisol (Raina, Rosen) (165) 470
γ-Glutamyl-β-cyanoalanylglycine
---, a metabolite of β-cyanoalanine in the rat and chick (Sasaoka et al.)(156) 128
Glutathione-insulin transhydrogenase
Mechanism of action of ---. Presence of a functional sulphydryl group for activity (Varandani, Plumley)(151) 273
Glutathione peroxidase
Formation of monohydroxy-polyenic fatty acids from lipid peroxides by a --- (Christophersen)(164) 35
Glutathione reductase
--- -dependent metabolism of cysteine-S-sulfate by Penicillium chrysogenum (Woodin, Segel)(167) 78
Glutathione reductase
Electrophoresis of --- from human erythrocytes (Blume, Rüdiger, Löhr)(151) 686
Glutathione reductase
Isolation and characterization of --- from Penicillium chrysogenum (Woodin, Segel) (167) 64
Glutathionine-cystine transhydrogenase
Distribution of glutathionine reductase and detection of --- in rat tissues (Wendell) (159) 179
Glutathionine reductase
Distribution of --- and detection of glutathionine-cystine transhydrogenase in rat tissues (Wendell)(159) 179
Glutenin
Aminoethylation and fractionation of ---: Evidence of differences from gliadin (Rothfus, Crow)(160) 404
Glyceraldehyde-3-phosphate dehydrogenase
Effect of a growth hormone fraction on the activity of --- (Bornstein, Armstrong, Jones) (156) 38
Glyceraldehydephosphate dehydrogenase
Reaction between NAD$^+$ and rabbit-muscle --- (De Vijlder, Slater)(167) 23
Glyceraldehyde-3-phosphate dehydrogenase
Studies on the oxidative fraction obtained by chymotrypsin hydrolysis of --- (Cantau, Brunel, Pudles)(167) 511
Glycerides
Characterization of tissue lipolytic activity and esterolytic activity cleaving full and partial --- (Biale, Gorin, Shafrir)(152) 28
$[^{14}C_3]$Glycerol
Incorporation of --- into lipids by dispersed bovine mammary cells (Kinsella)(164) 540
Glycerol dehydrogenase
Inhibition of --- from Aerobacter aerogenes by dihydroxyacetone, high ionic strength, and monovalent cations (Strickland, Miller)(159) 221
Glycerol trioctadecenyl ether
Intestinal absorption of --- (Spener, Paltauf, Holasek)(152) 368
α-Glycerophosphate
Effect of intravenous fructose and glucose on the hepatic --- concentration in the rat (Zakim, Herman)(165) 374

α-Glycerophosphate dehydrogenase
  Mechanism of action of rabbit muscle --- (Telegdi)(159) 227
α-Glycerophosphate oxidase
  Malate dehydrogenase (decarboxylating) (NADP) and --- in the developing rat (Hemon)(151) 681
Glycerophosphatides
  Inhibition of phospholipase C by phosphonate analogs of --- (Rosenthal, Pousada) (164) 226
Glycerophosphoric acid
  Incorporation of labelled --- into the lipids of rat brain preparations. III. On the phosphatidyl glycerol biosynthesis (Possmayer, Balakrishnan, Strickland)(164) 79
Glyceroylcholine
  Molecular aspects of the interaction of lactocylcholine and --- with acetylcholinesterase (Rama Sastry, White)(151) 597
Glyceryl diethers
  Chemical synthesis of 1-O-(D)- and 3-O-(L)-glyceryl monoethers, --- and derivatives: Glycerides, monoester phospholipids and diether phospholipids (Chacko, Hanahan) (164) 252
Glyceryl ether glycerol
  Synthesis of --- in Tetrahymena pyriformis (Friedberg, Greene)(164) 602
Glyceryl monoether
  Chemical synthesis of 1-O-(D)- and 3-O-(L)- ---, glyceryl diethers and derivatives: Glycerides, monoester phospholipids and diether phospholipids (Chacko, Hanahan) (164) 252
Glycerylphosphorylcholine diesterase
  Rat kidney --- (Baldwin, Cornatzer) (164) 195
Glyceryl-triphytanate
  Action of lipoprotein lipase on --- (Laurell) (152) 80
Glycine acyltransferase
  Rat liver ---: Partial purification and some properties (Brandt, Simmons, Gutfinger) (167) 196
Glycine max. Merr.
  Iron in relation to aconitate hydratase activity in --- (Hsu, Miller)(151) 711
Glycogen
  Glucose as a regulator of glycogen phosphorylase in rat diaphragm. I. Effect of glucose and related compounds on phosphorylase and --- levels (Holmes, Mansour) (156) 266
Glycogen
  Incorporation of 2-deoxy-D-glucose into --- (Biely, Farkas, Bauer)(158) 487
Glycogen
  Recovery of liver --- in fasted rats (Olavarria et al.)(165) 185
Glycogen biosynthesis
  --- in leucocytes of normal and alloxan diabetic rats (Pérez, Hedeskov, Esmann) (156) 414
Glycogen metabolism
  Regulation of --- in liver by the autonomic nervous system. II. Neural control of glycogenolytic enzymes (Shimazu, Amakawa) (165) 335
Glycogen metabolism
  Regulation of --- in liver by the autonomic nervous system. III. Differential effects of sympathetic-nerve stimulation and of catecholamines on liver phosphorylase (Shimazu, Amakawa)(165) 349
Glycogenolytic enzymes
  Regulation of glycogen metabolism in liver by the autonomic nervous system. II. Neural control of --- (Shimazu, Amakawa) (165) 335
Glycogen phosphorylase
  Control of muscle --- activity by insulin (Torres et al.)(156) 206
Glycogen phosphorylase
  Effect of 5-hydroxytryptamine on --- (Sümegi, Damjanovich, Csaba)(159) 545
Glycogen phosphorylase
  Glucose as a regulator of --- in rat diaphragm. I. Effect of glucose and related compounds on phosphorylase and glycogen levels (Holmes, Mansour)(156) 266
Glycogen phosphorylase
  Glucose as a regulator of --- in rat diaphragm. II. Effect of glucose and related compounds on phosphorylase phosphatase (Holmes, Mansour)(156) 275
Glycolic acid
  Hydroxylation of acetic acid to --- in rabbits (Jagow, Kiesse, Lenk)(158) 45
Glycolipids
  --- containing glucose and uronic acids in Pseudomonas species (Wilkinson)(152) 227
Glycolipids
  Studies on sphingosines. XIV. On the phytosphingosine content of the major human kidney --- (Karlsson, Mårtensson)(152) 230
Glycollate metabolism
  --- in photosynthesising tissue (Thompson, Whittingham)(153) 260
Glycollate oxidase
  --- in Chlorella pyrenoidosa (Lord Merrett) (159) 543
N-Glycolylneuraminic acid
  Presence of --- in HeLa cells (Carubelli, Griffin)(170) 446
Glycolysis
  2,3-Diphosphoglycerate metabolism and --- in human erythrocytes under the influence of dipyridamole and inorganic sulphur compounds (Duhm, Deuticke, Gerlach)(170) 452
Glycolysis
  Reversibility of the first segment of --- in ascites tumour cells (Sauermann)(158) 1
Glycolysis
  Role of --- in energy production in the isolated skin of the brown frog (Rana temporaria L.)(Kristensen, Shousboe)(153) 132
Glycolysis
  Valinomycin-stimulated --- in Ehrlich ascites tumour cells (Gordon, De Hartog) (162) 220
Glycolytic capacity
  Hexokinase activity and --- of plasma membranes of hepatomas (Davidova, Shapot, Solowjeva)(158) 303
Glycolytic enzymes
  Activities of --- during the early stages of differentiation in the cellular slime mold Dictyostelium discoideum (Cleland, Coe) (156) 44
Glycolytic enzymes
  Dietary regulation of ---. I. Adaptive changes in rat jejunum (Stifel et al.)(170) 221
Glycolytic enzymes
  Dietary regulation of the ---. II. Adaptive changes in human jejunum (Rosensweig et al.)(170) 228
Glycolytic enzyme activities
  Relationship of some rat liver --- to plasma

insulin concentration (Firth, Hales) (156) 411
Glycopeptide
Amino acid sequence of a tryptic --- from human thyroglobulin (Rawitch, Liao, Pierce)(160) 360
Glycopeptides
Determination of molecular weight of --- by exclusion chromatography (Bhatti, Clamp)(170) 206
Glycopeptide
Isolation and composition of a --- from a phytohaemagglutinin of Phaseolus vulgaris (Takahashi, Liener)(154) 560
Glycopeptide
Purification and physicochemical properties of a phytohaemagglutinin from Robinia pseudoaccacia. Isolation of an active --- (Bourrillon, Font)(154) 28
Glycopeptides
Structure of dermatan sulphate. IV. --- from the carbohydrate-protein linkage region of pig skin dermatan sulphate (Fransson)(156) 311
Glycopeptides
Studies on the structure of human α_2-macroglobulin (α_2M). II. Preparation and properties of the --- isolated from an enzymatic hydrolysate of α_2M (Bourrillon, Razafimahaleo, Parnaudeau (154) 405
Glycopeptide-degrading enzyme
Distribution of a --- in tissues and cells (Ohgushi, Yamashina)(156) 417
Glycoprotein
--- biosynthesis in culture cells in vitro (Got et al.)(157) 599
Glycoprotein
Incorporation of D-$[^{14}C]$galactose and N-$[^{3}H]$acetylneuraminic acid into --- by particles from bovine retina (O'Brien, Muellenberg)(158) 189
Glycoprotein
Mechanism of oxidative gelation of a --- from wheat flour: Evidence from a model system based upon caffeic acid (Painter, Neukom)(158) 363
Glycoprotein
Preparation and properties of a --- from pigs' blood platelets (Mullinger, Manley) (170) 282
Glycoproteins
Studies on ---. XVII. Purification of O-seryl-N-acetylgalactosaminide glycohydrolase. Its complete separation from N-acetyl-β-D-hexosaminidase and proteinases (Schauer, Gottschalk)(156) 304
Glycoproteins
Studies on ---. XVIII. Formation of diborane and dimethoxyborane in the lithium borohydride test for esters as a source of misinterpretation (Gottschalk, König)(158) 358
Glycoprotein biosynthesis
--- by cell-free microsome system from guinea pig liver (Simkin et al.)(170) 422
Glycoprotein biosynthesis
--- in sheep thyroid slices incubated with radioactive glucosamine and leucine. I. Polysomes, microsomes and postmicrosomal fraction (Cheftel, Bouchilloux)(170) 15
Glycoprotein biosynthesis
--- in sheep thyroid slices incubated with radioactive glucosamine and leucine. II. A study of microsomal subfractions (Cheftel, Bouchilloux, Chabaud)(170) 29
Glycoprotein structure
---: Carbohydrate of bovine corneal collagen (Bosman, Jackson)(170) 6
Glycosaminoglycans
Acid --- in fetal pig epidermis (Smith, Davidson)(165) 182
Glycosaminoglycans
--- of adult frog back skin (Lipson, Silbert) (158) 344
Glycosaminoglycans
Application of cetylpyridinum-complex elution methods to analysis of --- of tendon (Dorner, Antonopoulos, Gardell)(158) 336
Glycosaminoglycans
Biosynthesis of --- (mucopolysaccharides) in human leucocytes (Olsson, Gardell, Thunell)(165) 309
Glycosaminoglycans
Biosynthesis of --- (mucopolysaccharides) in leukemic myeloid cells (Olsson)(165) 324
Glycosaminoglycans
Content of --- (mucopolysaccharides) in mouse fetus and placenta (Švejcar)(165) 84
β-Glycosidases
Effect of testosterone on --- in rooster comb and wattles (Robinson, Stirling) (170) 420
Glycosides
Lysis of --- in the presence of L-ascorbic acid (Caygill)(170) 1
Glycosyl diglycerides
--- from Pseudomonas rubescens (Wilkinson)(164) 148
Glycosyl transfer enzymes
Properties of --- of bovine retina (O'Brien, Muellenberg)(167) 268
Glycylglycylglycyl$[^{14}C]$phenylalanyl transfer RNA
Chemical synthesis of glycylglycyl $[^{14}C]$phenylalanyl transfer RNA and --- (Lapidot et al.)(157) 433
Glycylglycyl$[^{14}C]$phenylalanyl transfer RNA
Chemical synthesis of --- and glycylglycylglycyl$[^{14}C]$phenylalanyl transfer RNA (Lapidot et al.)(157) 433
Glyoxal
Influence of --- on cell function (Klamerth) (155) 271
Glyoxal
Reactions of --- with nucleic acids, nucleotides and their component bases (Nakaya et al.)(161) 23
Glyoxal-bis(guanylhydrazone)
Differential effects of putrescine, cadaverine and --- on DNA- and nucleohistone-supported DNA synthesis (Schwimmer) (166) 251
Gramicidin S
Peptide conjugate with the sequence Phe--Pro-Val-Orn and its relationship to the biosynthesis of --- (Holm, Frøholm, Laland) (158) 459
Granulocytes
Purification of plasminogen from human --- using DEAE-Sephadex column chromatography (Prokopowicz)(154) 91
Growth factor
Activation of a --- by non-physiological means (Sayre, Fishler, Jayko)(160) 204
Growth factors
Function of --- for rumen microorganisms. II. Metabolic fate of incorporated fatty acids in Selenomonas ruminantium (Kanegasaki, Takahashi)(152) 40
Growth factor
--- studies: Changes in reactivity of sul-

phydryl groups with activation (Sayre et al.) (160) 63

Growth hormone
Counter-current distribution of RNA from rat liver: Effect of ---, thyroxine, and hydrocortisone on distribution patterns (Jackson, Sells)(155) 417

Growth hormone
Effect of a --- fraction on the activity of glyceraldehyde-3-phosphate dehydrogenase (Bornstein, Armstrong, Jones)(156) 38

Growth hormone
--- effects on histidine incorporation into protein by adipose tissue from hypophysectomized rats (Swislocki)(169) 556

Growth hormone
Human pituitary ---. XVI. Reduction with dithiothreitol in the absence of urea (Bewley, Dixon, Li)(154) 420

Growth hormone
Human pituitary ---. XVII. The hydrogen--deuterium exchange of the hormone (Squire, Ottesen)(154) 226

Growth hormone
Human pituitary ---. XVIII. The amino acid sequence in the proline-rich region of residue (Li, Dixon, Chung)(160) 472

Growth hormone
Mechanism of stimulation of polyamine synthesis by --- in rat liver (Jänne, Raina, Siimes)(166) 419

Growth hormone
Physicochemical behaviour and biological activity of bovine --- in acidic solution (Dellacha, Enero, Paladini)(168) 95

Growth hormone
Purification of rat prolactin and --- using preparative polyacrylamide gel electrophoresis (Groves, Sells)(168) 113

Guaiacylglycerol-β-guaiacyl ether
Oxidation of --- and veratrylglycerol-β-guaiacyl ether by Polyporus versicolor and Stereum frustulatum (Kirk, Harkin, Cowling)(165) 134

Guanosine diphosphate-2-deoxy-D-glucose
Formation of --- in yeast (Biely, Bauer) (156) 432

Guanosine 5'-diphosphate-D-rhamnose
Synthesis of --- by enzymes of a higher plant (Barber)(165) 68

Guanosine 5'-triphosphate
Effect on univalent cations and the role of --- and supernatant factors during biosynthesis of polylysine chain (Pulkrábek, Rychlík)(155) 219

H

- Haem
  - Preparation of a new haemoglobin partially saturated with ---: Semihaemoglobin β (Cassoly)(168) 370
- Haem a
  - Structure of the long alkyl side chain of --- (Nichol, Lemberg, Harrap)(158) 165
- Haem biosynthesis
  - Porphyrin biosynthesis. IV. 5- and 6-COOH porphyrinogens (type III) as normal intermediates in --- (San Martin de Viale, Grinstein)(158) 79
- Haem protein
  - Optical rotatory dispersion of a respiratory --- of Chironomus thummi (Formanek, Engel)(160) 151
- Haem proteins
  - Transition between "acid" and "alkaline" ferric --- (Brunori et al.)(154) 315
- Haem synthesis
  - Action of 2-methyl-2-n-propyl-1,3-propanedioldicarbamate on the porphyrin synthesis and --- in Achromobacter metalcaligenes(Doss)(170) 461
- Haem synthesis
  - Inhibition of --- and globin synthesis by cobalt in rabbit reticulocytes and bone marrow(Schulman, Jobe)(169) 241
- Haematin
  - Formation of alkylthiohaemoglobins and the structure of their --- groups (Nichol, Morell)(158) 226
- Haematoporphyrin
  - Electron donor-acceptor properties of --- (Heathcote et al.)(153) 13
- Haemocyanin
  - Effect of photooxidation and histidine reagents on Murex trunculus --- (Wood, Bannister)(154) 10
- Haemoglobin
  - Action of histones of various origins on the acellular biosynthesis of --- and on reticulocyte RNA(Kruh, Labie)(161) 518
- Haemoglobin
  - Charge-transfer interpretation of the interactions of --- with oxygen and carbon monoxide(Politzer)(153) 799
- Haemoglobins
  - Electron spin resonance of four human --- (Bemski, Nagel)(154) 592
- Haemoglobin
  - Gene duplication of the α chain of goat ---: Evidence from a homozygous mutant (Garrick, Huisman)(168) 585
- Haemoglobin
  - Hydroxylamine and biosynthesis of --- by reticulocytes(Kruh et al.)(161) 215
- Haemoglobin
  - Interaction between reticulocyte polyribosomes and isolated human --- polypeptide chains(Fischer, Nagel, Fuhr)(169) 566
- Haemoglobin
  - Intraspecific polymorphism of --- in Tinca tinca(Callegarini, Cucchi)(160) 264
- Haemoglobin
  - Preparation of a new --- partially saturated with haem: Semihaemoglobin β (Cassoly) (168) 370
- Haemoglobins
  - Proton magnetic relaxation in solution of lamprey(Petromyzon marinus) --- (Maričić, Rumen)(154) 496
- Haemoglobin
  - Reactions of partially oxidised --- solutions. I. Separation of intermediate compounds by CM-Sephadex chromatography (Ford, Ainsworth)(160) 1
- Haemoglobin
  - Reactions of partially oxidised --- solutions. II. A matrix rank analysis of the initial rates of binding carbon monoxide(Ainsworth, Bingham)(160) 10
- Haemoglobin
  - Reactions of partially oxidised --- solutions. III(Ainsworth, Ford)(160) 18
- Haemoglobin
  - --- of unfertilized egg of Bufo vulgaris japonicus(Sugita et al.)(160) 291
- Haemoglobin $_{\mathrm{Bibba}}$
  - --- or $\alpha_2{}^{136\,\mathrm{Pro}}\beta_2$, an unstable α chain abnormal haemoglobin (Kleihauer et al.)(154) 220
- Haemoglobin $_{\mathrm{Chiapas}}$
  - Chemical characterization of haemoglobin $_{\mathrm{Mexico}}$ and --- (Jones, Brimhall, Lisker) (154) 488
- Haemoglobin D
  - Sheep --- , an α chain variant with one apparent amino acid substitution (α15 Gly → Asp)(Huisman et al.)(160) 467
- Haemoglobin $_{\mathrm{Dhofar}}$
  - --- –a new variant from Southern Arabia (Marengo-Rowe et al.)(168) 58
- Haemoglobin M
  - Properties of ---. Unequivalent nature of the α and β subunits in the haemoglobin molecule(Hayashi et al.)(168) 262
- Haemoglobin M $_{\mathrm{Hyde\ Park}}$
  - Oxygen equilibrium of --- (Ranney et al.) (160) 112
- Haemoglobin $_{\mathrm{Mexico}}$
  - Chemical characterization of --- and haemoglobin $_{\mathrm{Chiapas}}$ (Jones, Brimhall, Lisker) (154) 488
- Haemoglobin N$_{\mathrm{Seattle}}$
  - Structural characterization of ---: $\alpha_2A\beta_2{}^{61\,\mathrm{Glu}}$ (Jones et al.)(154) 278
- Haemoglobin biosynthesis
  - --- by preparations of reticulocyte membranes(Kruh)(169) 511
- Haemoglobin synthesis
  - --- during rabbit reticulocyte maturation in vitro(Schulman)(155) 253
- Haemoglobin variants
  - Characterization of the α chain core of human --- (Carell, Irvine)(154) 78
- Haemolysis
  - Kinetics of --- of human erythrocytes in hypotonic solutions of glucose (Good, Rose) (163) 483
- Haemolysis
  - Kinetics of malonamide-induced --- of mammalian erythrocytes. I. The Arrhenius activation parameters (Coldman, Good) (150) 194
- Haemolysis
  - Kinetics of malonamide-induced --- of

- mammalian erythrocytes. II. The Eyring activation parameters (Coldman, Good) (150) 206
- Halobacterium cutirubrum
  - Synthesis of the phytanyl diether analogs of phosphatidyl glycerophosphate and phosphatidyl glycerol present in --- (Joo, Kates)(152) 800
- Halogenation
  - --- of nucleic acids. VI. Iodination of nucleosides in dimethylformamide (Yoshida, Duval, Ebel)(161) 13
- Halophilic NADH dehydrogenase
  - Factors affecting the cation requirement of a --- (Hochstein, Dalton)(167) 638
- Heart cells
  - Effect of low concentrations of chloramphenicol on beating rat- --- in tissue culture (Kroon, Jansen)(155) 629
- Heavy water
  - Effect of --- on the membranous structures of the proximal and distal convoluted tubules of the mouse (Matty, Deutsch)(163) 14
- HeLa cells
  - Activation by leucine of ouabain-sensitive ATPase of --- (Mohri et al.)(150) 537
- HeLa cell
  - Inhibition of --- cultures by preparations of Escherichia coli L-asparaginase (Kim et al.) (158) 476
- HeLa cells
  - Nuclear system for DNA replication from synchronized --- (Friedman, Mueller) (161) 455
- Heparin
  - Effects on polyamino acids, histones and --- on amino acid incorporation into ribosomal proteins from rat liver (Berlinguet, Normand)(161) 509
- Heparin
  - Glucuronic acid- and glucosamine-containing oligosaccharides from the --- -protein linkage region (Lindahl)(156) 203
- Heparin
  - Isolation of --- and heparitin sulfate from hog skin (Cifonelli, Rodén)(165) 553
- Heparin
  - ---: Molecular weight and degradation studies (Braswell)(158) 103
- Heparitin sulphate
  - Enzymatic degradation of ---. II. Isolation and characterization of non-sulphated oligosaccharides (Linker, Hovingh)(165) 89
- Heparitin sulphate
  - Isolation of heparin and --- from hog skin (Cifonelli, Rodén)(165) 553
- Hepatectomized rat
  - $[^3H]$ Oleic acid metabolism in the partially --- (Fex, Olivecrona)(152) 237
- Hepatectomy
  - Adaptive response of tryptophan pyrrolase and tyrosine transaminase in rat liver after partial --- and laparotomy (Tsukada et al.)(165) 218
- Hepatectomy
  - Changes in ribonuclease activity in rat liver following --- (Maor, Alexander) (157) 627
- Hepatectomy
  - Secretion of triglyceride by the liver after partial --- (Fex, Olivecrona)(164) 424
- Hepatic damage
  - Changes in N-acetyl-β-glucosaminidase activity in --- (Koizumi et al.)(151) 628
- Hepatic microsomal activity
  - Injury and plasma protein biosynthesis. II. --- and polysomal organization (Liu, Neuhaus)(166) 195
- Hepatic nucleic acid
  - Injury and plasma protein biosynthesis. I. --- metabolism (Chandler, Neuhaus) (166) 186
- Hepatomas
  - Enzymes and intermediates of the pentose phosphate pathway in liver and --- (Gumaa, Greenslade, McLean)(158) 300
- Hepatomas
  - Hexokinase activity and glycolytic capacity of plasma membranes of --- (Davidova, Shapot, Solowjeva)(158) 303
- Hepatoma
  - Low molecular weight RNA of the chromatin fraction from Novikoff --- and rat liver nuclei (Prestayko, Busch)(169) 327
- Hepatoma
  - Studies on plasma membranes. VI. Differences in the effect of temperature on the ATPase and (Na^+-K^+)-ATPase activities of plasma membranes isolated from rat liver and --- (Emmelot, Bos)(150) 354
- Hepatoma plasma membranes
  - Studies on plasma membranes. VII. A leucyl-β-naphthylamidase-containing repeating unit on the surface of isolated liver and --- (Emmelot, Visser, Benedetti) (150) 364
- Hepatoma RNA
  - RNA fraction in normal rat liver and Morris 5123D --- (Mizuno, Hof, Collin)(166) 656
- Herpes simplex DNA
  - Incorporation of specifically labelled $[^{14}C]$ glucose into --- (Fisher, Fisher Jr.)(157) 634
- Hexadeca-4,7,10-trienoate
  - Synthesis and metabolism of ---, eicosa-8,11,14-trienoate, docosa-10,13,16-trienoate and docosa-6,9,12,15-tetraenoate in the rat (Sprecher)(152) 519
- Hexokinase
  - Association of epididymal adipose tissue --- with subcellular structure (Spydevold, Borrebaek)(167) 291
- Hexokinase activity
  - --- and glycolytic capacity of plasma membranes of hepatomas (Davidova, Shapot, Solowjeva)(158) 303
- Hexose
  - Strain variations in the utilization of --- by Ehrlich ascites tumour cells (Letnansky) (165) 364
- Hexose transport
  - Competition of sugars for the --- system in yeast (Van Steveninck)(150) 424
- Hexuronic acids
  - Periodate oxidation pK_a and conformation of --- polyuronides and mucopolysaccharides (Scott)(170) 471
- Hill reagent
  - Polarographic method for detection of oxygen production and reduction of --- by isolated chloroplasts (Joliot, Joliot)(153) 625
- Histamine
  - Specificity effects of cation binding to the macroion in the bovine serum albumin- --- interaction (Botré, Marchetti, Borghi) (154) 360
- Histidase
  - Purification and properties of rat liver --- (Cornell, Villee)(167) 172
- Histidine
  - Effect of photooxidation and --- reagents

on Murex trunculus haemocyanin (Wood, Bannister)(154) 10

Histidine

Preparation and characterization of phosphorylated derivatives of --- (Hultquist)(153) 329

L-Histidine acceptor transfer RNA

Species specificity of --- from microbes (Takeda)(169) 272

Histidine incorporation

Growth hormone effects on --- into protein by adipose tissue from hypophysectomized rats (Swislocki)(169) 556

Histidine operon

Studies on the size of the messenger RNA transcribed from the --- during simultaneous and sequentiol derepression (Venetianer et al.)(166) 124

L-Histidine transport

Effect of vitamin D on --- by intestine (Sugai, Matsuda)(170) 474

Histidine transport

--- into isolated animal cells (Christensen) (165) 251

Histones

Action of --- of various origins on the acellular biosynthesis of haemoglobin and on reticulocyte RNA (Kruh, Labie)(161) 518

Histones

Degradation of --- during the manipulation of isolated nuclei and deoxyribonucleoprotein (Stellwagen, Reid, Cole)(155) 581

Histones

Demonstration of species specificity of --- by immunological techniques (Fukazawa, Shimura)(154) 618

Histones

Differences in turnover between --- and their acetyl N-terminal groups (Byvoet) (160) 217

Histones

Effects of --- on induction of hepatic threonine dehydratase (Young, Irvin)(157) 643

Histones

Effects on polyamino acids, --- and heparin on amino acid incorporation into ribosomal proteins from rat liver (Berlinguet, Normand)(161) 509

Histones

Enzymatic acetylation of --- and some chemical characteristics of their acetyl groups (Nohara, Takahashi, Ogata)(154) 529

Histones

Induction of hepatic tryptophan pyrrolase and tyrosine transaminase by --- and other polypeptides (Caffery, Whichard, Irvin) (157) 616

Histones

Interaction of carcinogens with --- in vitro (Sluyser)(154) 606

Histones

Somatic --- from Mytilus edulis (Cozcolluela, Subirana)(154) 242

Histones

Studies on the biosynthesis of very lysinerich --- in isolated nuclei (Reid, Stellwagen, Cole)(155) 593

Homocitrate pathway

Localization of the --- (Betterton et al.) (170) 459

Homogentisic acid

Inhibition of cell-free protein synthesis by --- (Raghupathy, Peterson, McKean) (161) 575

Homoserine

Effect of temperature on the K_S for --- and the K_i for threonine of homoserine dehydrogenase from Chlamydomonas reinhardti (Vincze, Dénes)(159) 423

L-Homoserine

Formation of an enzyme-bound β-carbanion in the enzymic conversion of --- to α-ketobutyrate (Krongelb, Smith, Abeles) (167) 473

Homoserine dehydrogenase

Effect of temperature on the K_S for homoserine and the K_i for threonine of --- from Chlamydomonas reinhardti (Vincze, Dénes)(159) 423

Honey bee

Development-dependent mitochondrial enzyme activities in castes of the --- (Osanai, Rembold)(162) 22

Hordein

Fractionation of --- by gel filtration (Mesrob, Petrova, Ivanov)(160) 122

Hormonal control

--- of thyroid phosphorylase (Butcher, Serif) (156) 59

Hormone

Chromactivating hormones of Pandalus borealis. Isolation and purification of the "red-pigment-concentrating ---" (Fernlund, Josefsson)(158) 262

Hormone

Influence of age upon the response of rat testis to interstitial cell-stimulating --- in vitro (Sandler, Hall)(164) 445

Housefly

Studies on the biochemical basis of susceptibility and resistance of the --- to fluoroacetate (Zahavi, Tahori, Mager)(153) 787

Hyaluronate lyase

Studies on extracellular protein from Staphylococcus aureus. III. Investigation on the heterogeneity of --- using the method of isoelectric focussing (Vesterberg)(168) 218

Hyaluronic acid

Quantitative system for the study of collagen and --- synthesis in vitro (Wiener et al.) (166) 229

Hyaluronic acid

Studies on ---. I. The preparation and properties of rooster comb hyaluronic acid (Swann)(156) 17

Hyaluronic acid

Studies on ---. II. The protein component(s) of rooster comb hyaluronic acid (Swann) (160) 96

Hyaluronidases

Chromatographic distinction between --- from human serum and ovine testes (Bowness, Tan)(151) 288

Hyaluronidase

Effect of serum --- on acidic polysaccharide and its activity in cancer (Herp, DeFilippi, Fabianek)(158) 150

Hybrid

RNA-DNA --- formed by ribosomal RNA from a rat hepatoma (Brimacombe, Kirby) (157) 362

Hybridization

Intracellular localization and --- studies of a human statellite DNA (Giacomoni, Corneo)(166) 586

Hybridization

Investigation of the ribosomal RNA sites in yeast DNA by the --- technique (Retèl, Planta)(169) 416

Hybridization
Specific --- of amino acid-specific transfer RNA to DNA in Escherichia coli (Seno, Nishimura)(157) 97

Hybridization
Studies on tissue specificities of nuclear and ribosomal RNA using the DNA × RNA --- technique (Bielka, Junghahn)(166) 698

Hybridization
Techniques for --- of DNA in vitro using non-radioactive DNA and DNA made radioactive by neutron activation, alkylation with radioactive alkylating agents, and by exchange with ^3H_2O (Searcy)(166) 360

Hydrated liquid crystals
Surface properties of acidic phospholipids: Interaction of monolayers and --- with uni- and bivalent metal ions (Papahadjopoulos)(163) 240

Hydration of carbon dioxide
Rates of the spontaneous --- and the reciprocal reaction in neutral aqueous solutions between 0° and 38° (Magid, Turbeck)(165) 515

Hydrocarbons
Peroxide induced binding of --- to DNA (Morreal et al.)(169) 224

Hydrochloric acid secretion
Effect of inhibitors of --- on the unidirectional chloride flux across bullfrog gastric mucosa (Forte)(150) 136

Hydrocoleum
Spectral change of phycoerythrin from --- species and its relationship to protein dissociation. Effects of mercurials on single- and double-peaked forms (Pecci, Fujimori)(154) 332

Hydrocortisone
Counter-current distribution of RNA from rat liver: Effect of growth hormone, thyroxine, and --- on distribution patterns (Jackson, Sells)(155) 417

Hydrocortisone
Inhibition of casein turn-over by --- during mammary gland differentiation in vitro (Turkington)(158) 274

Hydrocortisone
Inhibitory effects of --- upon the phytohaemagglutinin-induced RNA synthesis in human lymphocytes (Ono et al.)(161) 361

Hydrogen
Action of insulin and triiodothyronine on energy-controlled pathways of --- (Schäfer, Nägel)(162) 617

Hydrogen
Incorporation of various --- precursors into the fatty acids of the living mouse (Rous et al.)(152) 462

Hydrogen ion secretion
Energy source for gastric --- (Sachs et al.)(162) 210

Hydrogen ion transport
Relationship of --- to photophosphorylation in spinach chloroplasts (Dilley, Shavit)(162) 86

Hydrogen transfer
--- in the enzymatic desaturation of cyclohexanecarboxyl-CoA (Galper, Babior)(158) 289

Hydrogenase
Properties of three isoenzymes of Clostridium pasteurianum --- (Kidman, Ackrell, Asato)(159) 185

Hydrogenases
Purification and properties of --- of different origins (Yagi, Honya, Tamiya)(153) 699

Hydrogen peroxide
Chemical analysis of DNA alterations. I. Base liberation and backbone breakage of DNA and oligodeoxyadenylic acid induced by --- and hydroxylamine (Rhaese, Freese)(155) 476

Hydrogen peroxide
Chemical analysis of DNA alterations. II. Alteration and liberation of bases of deoxynucleotides and deoxynucleosides induced by --- and hydroxylamine (Rhaese, Freese, Melzer)(155) 491

Hydrogen peroxide
Reversible dissociation of Escherichia coli ribosomes by --- (Nakamura, Tamaoki)(161) 368

Hydrogen peroxide
Role of the phagocyte in host-parasite interactions. XIII. The direct quantitative estimation of --- in phagocytes (Paul, Sbarra)(156) 168

Hydrogen peroxide decomposition
Cobalt inhibition of iron-catalyzed --- of riboflavin (Welkie)(158) 479

Hydrolase
Mean turnover times of five --- in the pancreas of normal rats and rats with malnutrition (Vandermeers et al.)(158) 448

Hydrolases
Studies on acid ---. IV. Isolation and characterization of spleen exonuclease (Bernardi, Bernardi)(155) 360

Hydrolases
Studies on acid ---. V. Isolation and characterization of spleen nucleoside polyphosphatase (Bernardi, Bernardi)(155) 371

Hydroxamic acids
Enzymatic N-O-methylation of --- (Lotlikar)(170) 468

L-α-Hydroxyacid oxydase
Aliphatic --- from rat livers: Purification and properties (Nakano et al.)(167) 9

Hydroxyapatite columns
Polypeptide chromatography and protein chromatography on --- (Bernardi, Kawasaki)(160) 301

D(−)-3-Hydroxybutyrate dehydrogenase
Stereochemistry of hydrogen transfer catalysed by --- (Savage, Weight)(159) 401

S-(2-Hydroxy-2-carboxyethylthio)cysteine
--- and S-(carboxymethylthio) cysteine in human urine (Ubuka et al.)(158) 493

4-Hydroxycinnamic acid
Hydroxylation-induced migration and retention of tritium on conversion of $[4-{}^3H]$cinnamic acid to --- by an enzyme from pea seedlings (Russel et al.)(170) 210

3-Hydroxy-4-O-β-D-glucosidobenzyl alcohol
Identification of --- in the left colleterial gland of Blaberus discoidalis (Pau, Acheson)(158) 206

β-Hydroxyisovaleric acid
Identification of --- in the urine of a patient with isovaleric acidemia (Tanaka, Orr, Isselbacher)(152) 638

Hydroxylamine
--- and biosynthesis of haemoglobin by reticulocytes (Kruh et al.)(161) 215

Hydroxylamine
Chemical analysis of DNA alterations. I. Base liberation and backbone breakage of DNA and oligodeoxyadenylic acid induced by hydrogen peroxide and --- (Rhaese, Freese)(155) 476

- Hydroxylamine
  - Chemical analysis of DNA alterations. II. Alteration and liberation of bases of deoxynucleotides and deoxynucleosides induced by hydrogen peroxide and --- (Rhaese, Freese, Melzer)(155) 491
- Hydroxylamine
  - Effect of --- and N-methylhydroxylamine on beef brain microsomal $(Na^+ + K^+)$-ATPase (Chignell, Titus)(159) 345
- Hydroxylase
  - System: Hydroxylamine-oxygen-cupric ion. A model --- in the inactivation of ox and pig liver carboxylesterases (Runnegar et al.)(167) 632
- Hydroxylation
  - Mechanism of aliphatic ---: Tetralin hydroperoxide as an intermediate in the hydroxylation of tetralin in rat-liver homogenate (Chen, Lin)(170) 366
- Hydroxylations
  - Microbial ---. II. Oxidative cleavage of the 17β -acetyl side-chain of progesterone by Aspergillus ochraceus (Tan, Smith) (152) 758
- Hydroxylations
  - Microbial ---. III. 11α-Hydroxylation of some 3α, 5α-cyclopregnane derivatives (Tan, Smith)(164) 389
- 11β-Hydroxylation
  - Further studies on corticosteidogenesis. V. --- of deoxycorticosterone by mitochondria incubated with malate, supernatant fraction and supernatant fraction plus pyruvate plus CO_2 (Péron, Caldwell)(164) 396
- Hydroxyl radicals
  - Chemical analysis of DNA alterations. III. Isolation and characterization of adenine oxidation products obtained from oligo- and monodeoxyadenylic acids treated with --- (Rhaese)(166) 311
- 4-Hydroxy-3-methoxy-DL-mandelic acid
  - Synthesis and identification of the epinephrin metabolite --- (Goodman et al.) (156) 364
- Hydroxylysine
  - Isolation of collagens of high hydroxyproline, --- and carbohydrate content from muscle layer of Ascaris lumbricoides and pig kidney (Fujimoto)(168) 537
- Hydroxymethylation
  - --- of the benzene ring. IV. p-Hydroxymethyl-L-phenylalanine, a naturally occurring amino acid in Escherichia coli: Identification and biochemical properties (Sloane, Smith)(158) 394
- p-Hydroxymethyl-L-phenylalanine
  - Hydroxymethylation of the benzene ring. IV. ---, a naturally occurring amino acid in Escherichia coli: Identification and biochemical properties (Sloane, Smith) (158) 394
- 4-Hydroxyphenyl pyruvate
  - Tyrosine biosynthesis in Aerobacter aerogenes: Evidence for a subunit structure of the protein converting chorismate into --- (Cotton, Gibson)(160) 188
- Hydroxyproline
  - Correlation between pronase susceptibility and --- content of collagen fiber (Fujimoto)(154) 183
- Hydroxyproline
  - Hydroxyprolinemia III. The origin of free --- in hydroxylprolinemia. Collagen turnover. Evidence for a biosynthetic pathway in man (Efron et al.)(165) 238
- Hydroxyproline
  - Isolation of collagens of high ---, hydroxylysine and carbohydrate content from muscle layer of Ascaris lumbricoides and pig kidney (Fujimoto)(168) 537
- Hydroxyproline
  - Role of glutamic acid as a precursor of collagen proline and --- (Ishibashi, Ide, Tsurufuji)(165) 296
- Hydroxyprolinemia
  - ---. III. The origin of free hydroxyproline in hydroxyprolinemia. Collagen turnover. Evidence for a biosynthetic pathway in man (Efron et al.)(165) 238
- 2-Hydroxystearic acid
  - α-Oxidation of --- in vitro (Lippel, Mead) (152) 669
- 3β-Hydroxysteroid dehydrogenase
  - Stereospecificity of hydrogen transfer by bovine adrenal --- (Warren, Cheatum) (159) 540
- 5-Hydroxytryptamine
  - Effect of --- on glycogen phosphorylase (Sümegi, Damjonovich, Csaba)(159) 545
- Hydroxyurea
  - Studies with ---. VIII. The DNA of hydroxyurea-treated cells (Rosenkranz, Jacobs, Carr)(161) 428
- Hyperchylomicronemia
  - Plasma post-heparin lipolytic activity in --- (fat-induced lipemia) (Bradford, Furman) (164) 172
- Hyperglycemic mice
  - Lipid metabolism in livers of normal mice and obese --- (Winand, Furnelle, Christophe)(152) 280
- Hypophysectomized rats
  - Distribution of sialic acids and other carbohydrates in skin of intact and --- (Herp, Pigman)(165) 76
- Hypophysectomized rats
  - Growth hormone effects on histidine incorporation into protein by adipose tissue from --- (Swislocki)(169) 556
- Hypothalamus
  - Isolation of a new oxytocic substance from ox --- (North, Hawker, Zerner)(160) 286
- Hypoxanthine-guanine phosphoribosyltransferase
  - Accelerated purine biosynthesis de novo in skin fibroblasts deficient in --- activity (Rosenbloom et al.)(166) 258

I

Imidazole
Complex formation between p-benzosemiquinone and --- and its derivatives (Leterrier, Balny, Douzou)(154) 444
Imides
Acylation reactions with cyclic --- (Smyth, Tuppy)(168) 173
Immunoglobulin
Homologies in the primary structure of --- heavy chains from different animal species (Walsh, Lisowska-Bernstein, Lamm) (168) 64
γG-Immunoglobulin
Isolation and characterization of κ and λ chains of normal human --- (Franěk, Brummelová, Škvařil)(160) 321
Immunological techniques
--- following microelectrophoresis on polycrylamide gel (Felgenhauer)(160) 267
Indigoidine
Leucoindigoidine formation by an Arthrobacter species and its oxidation to --- by other micro-organisms (Heumann, Young, Gottlich)(156) 429
Indole
Bacterial oxidation of --- (Fujioka, Wada) (158) 70
Indolealkylamines
Enzymic 6-hydroxylation of --- and related compounds (Jaccarini, Jepson)(156) 347
Induction
Effects of histones on --- of hepatic threonine dehydratase (Young, Irvin)(157) 643
Infectivity
Effect of RNA on the --- of phage DNA (Bailey, Fry)(166) 726
Influenza virus neuraminidase
--- and the viral surface (Kendal, Biddle, Belyavin)(165) 410
Inhibition of protein synthesis
Completion of ribosomal particles in Escherichia coli during --- (Dalgarno, Gros) (157) 52
Inhibition of protein synthesis
Mechanism of --- by spiramycin (Ahmed) (166) 205
γInhibitor
Isolation and properties of ---: An equine α_2-macroglobulin sub-fraction (Pepper) (156) 327
Initiation
Chain --- during polypeptide synthesis in a cell-free bacterial system programmed with plant viral messengers. I. Dependence on formylation and ribosomal factors (Reinecke et al.)(157) 566
Initiation
Chain --- during polypeptide synthesis in cell-free bacterial systems programmed with plant viral messengers. II. The role of N-formylmethionine (Hoogendam et al.) (157) 579
Initiation
Effect of olivomycin and echinomycin on --- and growth of RNA chains catalyzed by RNA polymerase (Gause, Loshkareva, Zbarsky)(166) 752
Initiation of chains
--- by RNA polymerase and the effects of inhibitors studied by a direct filtration technique (Sentenac, Simon, Fromageot) (161) 299
Inorganic ions
Distribution of --- in lobster muscle (Dunham, Gainer)(150) 488
Inorganic pyrophosphatase
--- activity of human placental alkaline phosphatase (Sussman, Laga)(151) 281
Inorganic pyrophosphate-glucose phosphotransferase
Liver microsomal ---: Alterations in activity-pH profiles by cortisone in vivo (Nordlie et al.)(158) 157
scyllo-Inosamine
Streptomycin biosynthesis: Enzymatic synthesis of --- from scyllo-inosose and L-glutamine (Walker, Walker)(170) 219
Inosine
Modification of nucleosides and nucleotides. VII. Selective cyanoethylation of --- and pseudouridine in yeast transfer RNA (Yoshida, Ukita)(157) 455
Inosine
Modification of nucleosides and nucleotides. X. Evidence for the important role of --- residue in codon recognition of yeast alanine transfer RNA (Yoshida, Kaziro, Ukita) (166) 646
myo-Inositol permeability
Changes in --- in the lens due to cataractous conditions (Broekhuyse)(163) 269
myo-Inositol
Effects of --- deficiency upon the lipid composition of the yeast, Saccharomyces carlsbergensis (Shafai, Lewin)(152) 787
myo-Inositol
Enthalpy change in the hydrolysis of the phosphate esters of --- (Raison, Evans) (170) 448
myo-Inositol
Measurement of ---, myo-inosose-2 and scyllo-inositol in mammalian tissues (Sherman et al.)(158) 197
scyllo-Inositol
Measurement of myo-inositol, myo-inosose-2 and --- in mammalian tissues (Sherman et al.)(158) 197
scyllo-Inositol
Metabolism of --- in Streptomyces griseus (Horner, Thaker)(165) 306
myo-Inosose-2
Measurement of myo-inositol, --- and scyllo-inositol in mammalian tissues (Sherman et al.)(158) 197
scyllo-Inosose
Streptomycin biosynthesis: Enzymatic synthesis of scyllo-inosamine from --- and L-glutamine (Walker, Walker)(170) 219
Insulin
Action of --- on the biosynthesis of amylase and some other enzymes of rat pancreas (Palla, Abdeljlil, Desnuelle)(158) 25
Insulin
Action of --- and triiodothyronine on energy-controlled pathways of hydrogen (Schäfer, Nägel)(162) 617

Insulin
  Analysis of the near ultraviolet circular dichroism of --- (Morris, Mercola, Arquilla) (160) 145
Insulin
  Cations and the secretion of --- (Milner, Hales)(150) 165
Insulin
  Control of muscle glycogen phosphorylase activity by --- (Torres et al.)(156) 206
Insulin
  Effect of glucose and --- in vitro on the uptake of triglyceride and on lipoprotein lipase activity in fat pads from normal fed rats (Austin, Nestel)(164) 59
Insulin
  Precursors of --- molecules (Konikova, Morenkova, Kritzman)(168) 252
Insulin
  Relationship of some rat liver glycolytic enzyme activities to plasma --- concentration (Firth, Hales)(156) 411
Insulin
  Relationship between the transport of glucose and cations across cell membranes in isolated tissues. III. Effect of Na$^+$ and hyperosmolarity on glucose metabolism and --- responsiveness in isolated rat hemidiaphragm (Clausen)(150) 56
Insulin
  Separation of the S-sulphonate of pig --- on DEAE-Sephadex A-25 (Shimonishi, Zahn) (154) 598
Insulin
  Specificity of human plasmin on the B-chain of oxidized bovine -- (Groskopf et al.) (168) 376
Insulin
  --- stimulation of [^{14}C] leucine incorporation into protein (Goldstein, Reddy) (150) 733
Insulin
  Studies related to the concept that a thiol disulphide interchange is involved in the action of --- on muscle cells (Wohltmann, Narahara)(150) 500
Interaction of mercurials
  --- with helical and random polyribouridylic acid (Millar)(166) 628
Interferon
  Recognition of viral RNA by mammalian ribosomes. An effect of --- (Carter, Levy) (155) 437
Interstitial cell-stimulating hormone
  Influence of age upon the response of rat testis to --- in vitro (Sandler, Hall)(164) 445
Interstitial cell-stimulating hormone
  Reaction of pituitary --- with periodate (Gan, Papkoff, Li)(170) 189
Intervertebral disc
  Proteins of the human ---. The association collagen with a protein fraction having an unusual amino acid composition (Steven, Jackson, Broady)(160) 435
Intestinal absorption
  Studies on transmural potentials in vitro in relation to ---. V. Kinetic characteristics of lipid interactions with rat gut (Lyon) (163) 75
Intestinal epithelial cells
  Studies on the organization of the brush border in ---. V. Subfractionation of enzymatic activities of the microvillus membrane (Eichholz)(163) 101
Intestinal mucosa
  Binding of trypsin and chymotrypsin by human --- (Goldberg, Campbell, Roy) (167) 613
Intestinal mucosa
  Effect of parathyroid hormone in vivo on the labelling of nuclear RNA from the --- and liver of vitamin D-deficient and normal chicks (Hamilton, Detert, Cohn) (155) 311
Intestinal mucosa
  Ion translocase system from rabbit ---. Preparation and properties of the (Na$^+$-K$^+$)-activated ATPase (Richardson)(150) 572
Intestine
  Transport and further metabolism of intermediate compounds of the tryptophan-nicotinic acid ribonucleotide pathway by rat small --- (Rose, Yao, Brown) (163) 93
Invertases
  Inhibition of --- by pyridoxal and its analogues (Pressey)(159) 414
Iodination of nucleosides
  Halogenation of nucleic acids. VI. --- in dimethylformamide (Yoshida, Duval, Ebel) (161) 13
Iodination system
  Stimulation of thiouracil binding and the --- in beef thyroid microsomes (Jirousek, Cunningham)(170) 160
Iodothyronines
  Thyroidal biosynthesis of ---. II. General characteristics and purification of mitochondrial monoamine oxidase (Fisher, Schulz, Oliner)(159) 460
Ion fluxes
  Effects of sodium azide and 2,4-dinitrophenol on phosphorylation reactions and --- in Saccharomyces cerevisiae (Riemersma) (153) 80
Ion transport
  --- in heart mitochondria. XIII. The effect of ethylenediaminetetraacetate on monovalent ion uptake (Settlemire, Hunter, Brierley)(162) 487
Ion transport
  Ouabain inhibition of --- and respiration in renal cortical slices of ground squirrels and hamsters (Willis)(163) 506
Ion transport
  --- and phospholipid labelling in rat liver mitochondria (Fang, Rasmussen)(153) 88
Ion transport
  Relation of the oxidoreduction level of electron carriers to --- in slices of avian salt-gland (Van Rossum)(153) 124
Ion transport
  Selective --- through bimolecular ospholipid membranes (Liberman, Topaly) (163) 125
Ionic strength
  Influence of --- and a polyanion transcription in vitro. I. Stimulation of the aggregate RNA polymerase from rat liver nuclei (Chambon et al.)(157) 504
Ionic stength
  Influence of --- and a polyanion on transcription in vitro. II. Effects on the template efficiency of rat liver chromatin for a purified bacterial RNA polymerase (Chambon et al.)(157) 520
Iron
  Regulation of synthesis of 2,3-dihydroxybenzoic acid in Bacillus subtilis by --- and a biological secondary hydroxamate (Byers,

Lankford)(165) 563

Iron-chelating agents
- Inhibition of bacteria by lactoferrin and other --- (Oram, Reiter)(170) 351

Iron-nitric oxide complexes
- Electron spin resonance of --- with amino acids, peptides and proteins (Woolum, Tiezzi, Commoner)(160) 311

Iron transport
- Phenolic acids and --- in Bacillus subtilis (Peters, Warren)(165) 225

Iron-transporting system
- --- in the body. I. Isolation and partial characterization of rabbit transferrin (Van Eyk, Leijnse)(160) 126

Irradiated DNA
- Formation of the thymine radical in --- (Lenherr, Ormerod)(166) 298

Isochorismic acids
- ---: A new intermediate in the biosynthesis of 2,3-dihydroxybenzoic acid (Young, Batoerham, Gibson)(165) 567

Isocitrate lyase
- ---: Determination of K_m values and inhibition by phosphoenolpyruvate (Syrett, John) (151) 295

Isocitrate lyase
- Repression of --- synthesis in seeds germinated in the presence of glucose (Lado, Schwendimann, Marrè)(157) 140

Isocitrate lyase
- Simple apparatus and procedure for electrofocusing experiments: pI of lactate dehydrogenase and --- (Weller, Heaney, Sjogren)(168) 576

Isoflavones
- Urinary conversion products of certain orally administered --- in the fowl (Tang, Common)(158) 402

Isoleucine biosynthesis
- Control of ---, valine biosynthesis and leucine biosynthesis. V. Dual effect of α-aminobutyric acid on repression and end-product inhibition in Escherichia coli (Freundlich, Clarke)(170) 271

Isoniazid acetylation
- Mechanism of --- by human N-acetyltransferase (Weber, Cohen)(151) 276

Isostichs
- Nucleotide clusters in DNA. III. Separation of purimidine --- according to base composition (Černý, Mushynski, Spencer) (169) 439

Isotope dilution
- New principle for the metabolite assay involving the combined effects of --- and enzymatic catalysis (Newsholme, Taylor) (158) 11

Isovaleric acidemia
- Identification of β-hydroxyisovaleric acid in the urine of a patient with -- (Tanaka, Orr, Isselbacher)(152) 638

J

Jejunum
  Transmural electrical potential across rat ---: Effects of eversion and rapid temperature changes(Baker et al.)(150) 649

K

Ketoaldehyde 2-keto-3-deoxyglucose
  Metabolism of the --- (Jellum)(165) 357
α-Ketobutyrate
  Formation of an enzyme-bound β-carbanion in the enzymic conversion of L-homoserine to --- (Krongelb, Smith, Abeles) (167) 473
2-Keto-3-deoxy-D-glucose
  Formation of --- (Otsuka, Együd)(165) 172
α-Ketoglutarate
  --- and hydroxylation of γ-butyrobetaine (Lindstedt et al.)(158) 503
α-Ketoglutaric acid
  Microbial degradation of progesterone to --- and succinic acid (Schubert et al.) (152) 401
Ketones
  Interrelationships between liver composition, plasma glucose and ---, and hepatic acetyl-CoA and citric acid during prolonged starvation in the male rat (Herrera, Freinkel)(170) 244
Ketone bodies
  Effects of L-carnitine on utilization of --- and glucose in eviscerated rats and in nephrectomized rats (Söling, Appels) (158) 162
Δ^5-3-Ketosteroid isomerase
  --- activities in guinea-pig adrenal glands: The role of copper ions (Ewald, Chaikoff) (167) 444
Kinetin
  Acceleration of senescence and of the increase of chromatin-associated nucleases in excised barley leaves by abscisin II and its reversal by --- (Srivastava)(169) 534
Kinetin
  Effect of visible light on --- solutions (Bezemer-Sybrandy, Tasseron-de Jong, Veldstra)(161) 568
Krebs cycle enzymes
  Nitrate effect on --- in various bacteria (Wimpenny, Warmsley)(156) 297

L

Laccase, see p-Diphenol oxidase

Lactate
Incorporation of ^{3}H and ^{14}C into plasma --- following administration of [6-^{3}H-^{14}C] glucose (Dunn, Chenoweth, Schaeffer) (165) 170

Lactate utilization
--- by a strain of human somatic cells (Molinary, Cribbs, Kline)(158) 177

Lactate dehydrogenase
Anomalous multiplicities of --- (Fieldhouse, Masters)(151) 535

Lactate dehydrogenase
Antibody to ---. III. Uptake, accumulation and specific intracellular action in malignant cells (Ng, Gregory)(170) 45

Lactate dehydrogenase
Factors affecting recombination of --- isoenzyme subunits (Clausen, Hustrulid) (167) 221

Lactate dehydrogenase
Simple apparatus and procedure for electrofocusing experiments: pI of --- and isocitrate lyase (Weller, Heaney, Sjogren) (168) 576

Lactate dehydrogenase isozymes
Effects of buffer, pH, ionic strength and temperature on --- (Vesell, Fritz, White) (159) 236

Lactate dehydrogenase isozymes
Molecular size of --- in mature testes (Zinkham, Holtzman, Isensee)(160) 172

Lactobacillus brevis
Purification, crystallization and properties of the D-xylose isomerase from --- (Yamanaka)(151) 670

Lactocylcholine
Molecular aspects of the interaction of --- and glyceroylcholine with acetylcholinesterase (Rama Sastry, White)(151) 597

Lactoferrin
Inhibition of bacteria by --- and other iron-chelating agents (Oram, Reiter)(170) 351

β-Lactoglobulin
Kinetics of the reaction of N-ethylmaleimide with denatured --- and ovalbumin (Franklin, Leslie)(160) 333

β-Lactoglobulin A
Inhibition of tryptic proteolysis of --- by sucrose and some other sugars. Evidence of a conformational change of β-lactoglobulin A by linkage with sucrose (Clement-Metral, Yon)(160) 340

β-Lactoglobulin sulphenyl iodide
Reaction of thiouracil with --- (Jirousek) (170) 152

β-Lactoglobulin variants
Amino acid composition and peptide maps of --- (Bell, McKenzie, Shaw)(154) 284

Lactose synthetase
Enzymic and immunological activity of various B proteins of --- (Tanahashi, Brodbeck, Ebner)(154) 247

Laparotomy
Adaptive response of tryptophan pyrrolase and tyrosine transaminase in rat liver after partial hepatectomy and --- (Tsukada et al.)(165) 218

Laser
--- induced kinetics of cytochrome oxidation and the 518 mμ absorption change in spinach leaves and chloroplasts (Hildreth) (153) 197

Laser
--- as a light source for the photosynthesis and growth of Chlorella vannielii (Karlander, Krauss)(153) 312

Lathyrogens
Effect of --- on the rate of collagen fibril formation and dissolution (Shimizu, Golub, Glimcher)(168) 356

Lecithin
Alterations in the molecular species of rat-liver --- by cn-oil feeding to essential fatty acid-deficient rats as a function of time (Van Golde, Pieterson, Van Deenen) (152) 84

Lecithins
Distribution of methyl label into molecular species of liver --- from female rats injected with [Me-^{14}C] methionine (Tinoco et al.) (164) 129

Lecithins
Effects of estradiol and testosterone on the incorporation and distribution of [Me-^{14}C] methionine methyl in rat liver --- (Lyman et al.)(152) 197

Lecithins
Effects of temperature and cholesterol on the glucose permeability of liposomes prepared with natural and synthetic --- (Demel et al.)(150) 655

Lecithin
Intestinal absorption of --- and lysolecithin by lymph fistula rats (Nilsson)(152) 379

Lecithins
Monolayer characteristics of saturated 1,2-diacyl phosphatidylcholines (---) and phosphatidylethanolamines at the air-water interface (Phillips, Chapman)(163) 301

Lecithins
Physical studies of phospholipids. VIII. Nuclear magnetic resonance studies of diacyl-L-phosphatidylcholines (---) (Salsbury, Chapman)(163) 314

Lecithin
Physical studies of phospholipids. X. The effect of sonication on aqueous dispersions of egg yolk --- (Chapman et al.)(163) 255

Lecithin
Positional distribution of fatty acids in liver --- of rats as a function of dietary linoleate or linolenate (Pudelkewicz, Holman) (152) 340

Lecithins
Specificity for incorporation of choline and ethanolamine into rat liver microsomal --- (Rytter, Miller, Cornatzer)(152) 418

Lecithin
Studies on --- -cholesterol-water interactions by differential scanning calorimetry and X-ray diffraction (Ladbrooke, Williams, Chapman)(150) 333

Lecithin
Use of radioactive choline as a label for microsomal membranes. I. Selectivity of label

for endoplasmic reticulum and specificity for --- (Nagley, Hallinan) (163) 218
Lecithin metabolism
--- and lysolecithin metabolism by isolated mucosal cells of the toad bladder (Rosenbloom, Elsbach) (164) 72
Lecithinase
Studies on the --- from Penicillium notatum (Saito, Sato) (151) 706
Lemna minor
D-Apiose biosynthesis. IV. Formation of uridine diphosphate-apiose from uridine diphosphate-D-glucuronic acid in cell-free extracts of parsley (Apium petroselium L.) and --- (Sandermann Jr., Tisue, Grisebach) (165) 550
Lens
Changes in myo-inositol permeability in the --- due to cataractous conditions (Broekhuyse) (163) 269
Lens
--- as an osmometer and the effects of medium osmolarity on water transport, ^{86}Rb efflux and rubidium transport by the lens (Cotlier, Kwan, Beaty) (150) 705
Lens
Relationship between soluble and insoluble protein in the --- (Zigman, Lerman) (154) 423
Leucine biosynthesis
Control of isoleucine biosynthesis, valine biosynthesis and ---. V. Dual effect of α-aminobutyric acid on repression and end-product inhibition in Escherichia coli (Freundlich, Clarke) (170) 271
[^{14}C]Leucine incorporation
Insulin stimulation of --- into protein (Goldstein, Reddy) (150) 733
Leucocytes
Biosynthesis of glycosaminoglycans (mucopolysaccharides) in human --- (Olsson, Gardell, Thunell) (165) 309
Leucocytes
Conversion of glucosamine to glycose by --- cultures (Kornfeld, Gregory) (158) 468
Leucocytes
Gel electrophoresis of labelled nuclear proteins from bovine --- (Gray, Herzog, Steffensen) (157) 344
Leucocytes
Mechanism of the respiratory stimulations in saponine-treated ---. The KCN-insensitive oxidation of NADPH (Rossi, Zatti) (153) 296
Leucocytes
UDPG-glycogen synthetase activity in human --- (Williams, Lundholm) (158) 465
Leucoindigoidine
--- formation by an Arthrobacter species and its oxidation to indigoidine by other micro-organisms (Heumann, Young, Gottlich) (156) 429
Leuconostoc mesenteroides
Crystalline D-mannitol:NAD$^+$ oxidoreductase from --- (Sakai, Yamanaka) (151) 684
Leucosis group-specific antigen
Characterization of avian --- from avian myeloblastosis virus (Allen) (154) 388
Leucyl-β-naphthylamidase
Studies on plasma membranes. VII. A --- -containing repeating unit on the surface of isolated liver and hepatoma plasma membranes (Emmelot, Visser, Benedetti) (150) 364
Leukemic myeloid cells
Biosynthesis of glycosaminoglycans (mucopolysaccharides) in --- (Olsson) (165) 324
Ligamentum nuchae
Isolation and amino acid composition of insoluble elastin. Bovine foetal and adult aorta and --- (Steven, Jackson) (168) 334
Light-induced spectroscopic changes
--- in the 600-mμ region in leaves of a higher plant and in Chlorella (Fork, De Kouchkovsky) (153) 891
Light-scattering
Light-absorption and --- changes during shrinking and swelling of chloroplasts (Yamashita, Itoh, Shibata) (162) 610
Light-scattering patterns
--- of the vitreous humor (Bettelheim, Balazs) (158) 309
Lignin
Degradation of the --- model compound syringylglycol-β-guaiacyl ether by Polyporus versicolor and Stereum frustulatum (Kirk, Harkin, Cowling) (165) 145
Linalool
Conversion of --- to α-terpineol in citrus (Attaway, Busling) (164) 609
Linoleate
Positional distribution of fatty acids in liver lecithin of rats as a function of dietary --- or linolenate (Pudelkewicz, Holman) (152) 340
Linoleic acid
Effect of arachidonic acid on the microsomal desaturation of --- into γ-linolenic acid and their simultaneous incorporation into the phospholipids (Nervi, Brenner, Peluffo) (152) 539
Linoleic acid
Inhibition of prostaglandin synthesis by oleic acid, --- and linolenic acid (Pace-Asciak, Wolfe) (152) 784
Linoleic acid
Preferred metabolic pathway from --- to arachidonic acid in vitro (Marcel, Christiansen, Holman) (164) 25
Linolenate
Positional distribution of fatty acids in liver lecithin of rats as a function of dietary linoleate or --- (Pudelkewicz, Holman) (152) 340
γ-Linolenic acid
Effect of arachidonic acid on the microsomal desaturation of linoleic acid into --- and their simultaneous incorporation into the phospholipids (Nervi, Brenner, Peluffo) (152) 539
Linolenic acid
Inhibition of prostaglandin synthesis by oleic acid, linoleic acid and --- (Pace-Asciak, Wolfe) (152) 784
Lipase
Action of some effectors on the hydrolysis of long-chain triglycerides by pancreatic --- (Benzonana, Desnuelle) (164) 47
Lipase
Action of pancreatic --- on aggregated glyceride molecules in an isotropic system (Entressangles, Desnuelle) (159) 285
Lipase
α-Amylase and --- of the pancreas of the rat. Chromatographic purification, molecular weight determination and amino acid composition (Vandermeers, Christophe) (154) 110
Lipase
Characterization of lipoprotein --- (Greten,

Levy, Fredrickson)(164) 185
Lipase
Deacylation of isomeric diacyl [1-^{14}C]alkoxyglycerols by pancreatic --- (Snyder, Piantadosi)(152) 794
Lipase
Effect of glucose and insulin in vitro on the uptake of triglyceride and on lipoprotein --- activity in fat pads from normal fed rats (Austin, Nestel)(164) 59
Lipase
Induction of adipose tissue lipoprotein --- by nicotinic acid (Nikkilä, Pykälistö) (152) 421
Lipase
Physical and chemical properties of --- from Torulopsis ernobii (Motai, Ichishima, Yoshida)(154) 586
Lipase
Role of Ca^{2+} during the hydrolysis of insoluble triglycerides by pancreatic --- in the presence of bile salts (Benzonana)(151) 137
Lipase
Substrate specificity of pancreatic --- (Brockerhoff)(159) 296
Lipase activity
Effect of surface-active agents on post-heparin --- (Doizaki, Zieve)(152) 713
Lipids
Alk-1-enyl ether --- and alkyl ether lipids of bovine heart muscle (Schmid, Takahashi) (164) 141
Lipids
Association of --- and proteins in chloroplast lamellar membrane (Ji, Benson) (150) 686
Lipid
Binding of --- to protein in the low-density lipoprotein from the hen's egg (Evans et al.) (164) 566
Lipids
Biosynthesis of secretory --- from [2-^{14}C]acetate by bovine mammary cells in vitro (Kinsella, McCarthy)(164) 518
Lipids
Cooperation between mitochondria and the rest of the cell in the turnover of mitochondrial --- in apple parenchyma (Mazliak, Stoll, Abdelkader)(152) 414
Lipids
Detection of --- on thin-layer chromatograms with the periodate-Schiff reagents (Shaw)(164) 435
Lipids
Distribution of odd-numbered essential and other polyenoic fatty acids in rat liver --- (Sand, Schlenk)(164) 598
Lipids
Incorporation of labelled glycerophosphoric acid into the --- of rat brain preparations. III. On the phosphatidyl glycerol biosynthesis (Possmayer, Balakrishnan, Strickland)(164) 79
Lipids
Incorporation of [$^{14}C_3$]glycerol into --- by dispersed bovine mammary cells (Kinsella) (164) 540
Lipids
Incorporation of trimethylaminoethylphosphonic acid and dimethylaminoethylphosphonic acid into --- of housefly larvae (Bieber)(152) 778
Lipids
Isolation and analysis of two types of diester waxes from the skin surface --- of the rat (Nikkari, Haahti)(164) 294
Lipids
Metabolism in vivo of bovine erythrocyte --- (Winterbourn, Batt)(152) 412
Lipids
Nomenclature of --- (IUPAC-IUB Commission of Biochemical Nomenclature)(152) 1
Lipids
Osmium tetroxide fixation of --- for electron microscopy: A possible reaction mechanism (Riemersma)(152) 718
Lipid
Studies on plasma membranes. V. On the --- dependence of some phosphohydrolases of isolated rat-liver plasma membranes (Emmelot, Bos)(150) 341
Lipid
Studies on the structure of an ornithine-containing --- from non-sulphur Rhodopseudomonas spheroides (Gorchein) (152) 358
Lipid
Studies on transmural potentials in vitro in relation to intestinal absorption. V. Kinetic characteristics of --- interactions with rat gut (Lyon)(163) 75
Lipids
Synthesis of --- by liver plasma membranes. Incorporation of acyl-CoA derivatives into membrane lipids in vitro (Trams, Stahl, Robinson)(163) 459
Lipid classes
Quantitative analysis of simple --- by thin-layer chromatography (Skipski et al.) (152) 10
Lipid composition
Effects of myo-inositol deficiency upon the --- of the yeast, Saccharomyces carlsbergensis (Shafai, Lewin)(152) 787
Lipid composition
--- of Microbacterium lacticum (Shaw) (152) 427
Lipid composition
--- of the prepubertal and adult rat testis (Oshima, Carpenter)(152) 479
Lipid composition
--- of rat-liver plasma membranes (Dod, Gray)(150) 397
Lipid composition
--- and secretory activity of bovine mammary cells in vitro (Kinsella, McCarthy) (164) 530
Lipid membranes
Properties of black --- of chloroplast pigments (Ting et al.)(163) 439
Lipid metabolism
Bile acids and ---. III. Influence of bile acids on phospholipids in liver and bile of the isolated perfused dog liver (Swell, Cooper Bell Jr., Entenman)(164) 278
Lipid metabolism
--- in livers of normal mice and obese hyperglycemic mice (Winand, Furnelle, Christophe)(152) 280
Lipid peroxides
Formation of monohydroxy-polyenic fatty acids from --- by a glutathione peroxidase (Christophersen)(164) 35
Lipid-protein complexes
Spin-labelled --- (Barratt, Green, Chapman) (152) 20
Lipoamide dehydrogenase
Comparative study of the reversibility of the reaction catalysed by bacterial --- (McGarry)(159) 9

Lipoamide dehydrogenase
Intramitochondrial distribution of multiple forms of pig heart --- (Cohn et al.) (159) 182
Lipoamide dehydrogenase
Relations between conformations and activities of ---. I. Relation between diaphorase and lipoamide dehydrogenase activities upon binding of FAD by the apoenzyme (Kalse, Veeger)(159) 244
Lipoamide dehydrogenase
Relations between conformations and activities of ---. II. Some aspects of recombination with FAD analogues (Visser, McCormick, Veeger)(159) 257
Lipoamide dehydrogenase
Relations between conformations and activities of ---. III. Protein association-dissociation and the influence on catalytic properties (Visser, Veeger)(159) 265
Lipoamino acid ester
Siolipin A: A new --- isolated from Streptomyces sioyaensis (Kawanami, Kimura, Otsuka)(152) 808
Lipolysis
In vitro effect of prostaglandin and dietary fats on --- and esterification in rat adipose tissue (Pawar, Tidwell)(164) 167
Lipolytic activity
Characterization of tissue --- and esterolytic activity cleaving full and partial glycerides (Biale, Gorin, Shafrir)(152) 28
Lipolytic activity
Genetic variation of alkaline --- in rabbits (Schnatz, Corter)(167) 367
Lipolytic activity
Plasma post-heparin --- in hyperchylomicronemia (fat-induced lipemia) (Bradford, Furman)(164) 172
Lipolytic enzymes
--- of rat pancreatic juice (Morgan et al.) (167) 355
Lipoprotein
Binding of lipid to protein in the low-density --- from the hen's egg (Evans et al.) (164) 566
Lipoprotein
Characterization of the plasma membrane of Mycoplasma laidlawii. III. The formation and aggregation of small --- structures derived from sodium dodecyl sulfate-solubilized membrane components (Engelman, Morowitz)(150) 376
Lipoproteins
Isolation of human serum --- by zonal ultracentrifugation (Wilcox, Heimber) (152) 424
Lipoprotein
Molecular weight and subunit structure of human high density --- after chemical modification by succinic anhydride (Scanu, Reader, Edelstein)(160) 32
Lipoproteins
Physical-chemical changes in serum --- during incubation of human serum (Nichols et al.)(168) 87
Lipoprotein
Studies on the equilibration of radioisotopic cholesterol with human serum --- cholesterol in vitro (Rose)(152) 728
Lipoprotein lipase
Action of --- on glyceryl-triphytanate (Laurell)(152) 80
Lipoprotein lipase
Characterization of --- (Greten, Levy, Fredrickson)(164) 195
Lipoprotein lipase
Effect of glucose and insulin in vitro on the uptake of triglyceride and on --- activity in fat pads from normal fed rats (Austin, Nestel)(164) 59
Lipoprotein lipase
Inactivation of --- in buffered saline solutions (Fielding)(159) 94
Lipoprotein lipase
Induction of adipose tissue --- by nicotinic acid (Nikkilä, Pykälistö)(152) 421
Liposomes
Effect of cholesterol incorporation on the sensitivity of --- to the polyene antibiotic, filipin (Kinsky et al.)(152) 174
Liposomes
Effects of temperature and cholesterol on the glucose permeability of --- prepared with natural and synthetic lecithins (Demel et al.)(150) 655
Liposomes
Lipid composition and permeability of --- (De Gier, Mandersloot, Van Deenen) (150) 666
Lithium
Relationship between the glucose transport and cation transport across cell membranes in isolated tissues. IV. The "insulin-like" effect of --- ion (Clausen)(150) 66
Lithium borohydride test
Studies on glycoproteins. XVIII. Formation of diborane and dimethoxyborane in the --- for esters as a source of misinterpretation (Gottschalk, König)(158) 358
Liver composition
Interrelationships between ---, plasma glucose and ketones, and hepatic acetyl-CoA and citric acid during prolonged starvation in the male rat (Herrera, Freinkel) (170) 244
Living cells
Enzyme kinetics and substrate reactions in single --- (Kohen, Kohen, Thorell) (167) 635
Loach embryos
Effect of some metabolites on glucose-6-phosphate dehydrogenase activity in --- Yurowitzki, Milman)(151) 270
Lobster muscle
Distribution of inorganic ions in --- (Dunham, Gainer)(150) 488
Long-chain fatty acid
Distribution of --- -activating enzymes in rat tissues (Pande, Mead)(152) 636
Long-chain fatty acids
Fatty acid synthesis in mitochondria. Elongation of short-chain fatty acids and formation of unsaturated --- (Christ)(152) 50
Long-chain fatty acids
Mechanism of malonyl-CoA-independent fatty acid synthesis. I. The mechanism of elongation of --- by acetyl-CoA (Seubert et al.)(164) 498
Long-chain and polyunsaturated acids
Incorporation of --- into phosphatidate and phosphatidylcholine (Hill, Lands) (152) 645
Long-chain triglycerides
Action of some effectors on the hydrolysis of --- by pancreatic lipase (Benzonana, Desnuelle)(164) 47
Luciferase assay
Interference of myokinase in the determination of ATP by --- (De Leo, Giovannozzi-

Sermanni)(170) 208

Luminescence
Photochemistry of polynucleotides. III. Study of the --- of polynucleotides at normal temperature (Pochon, Leng, Michelson) (169) 350

Lymph fistula
Intestinal absorption of lecithin and lysolecithin by --- rats (Nilsson)(152) 379

Lysine
Conversion of --- to saccharopine by human tissues (Hutzler, Dancis)(158) 62

Lysine
Metabolism of D- and L- --- in the intact rat, perfused liver and liver mitochondria (Grove, Henderson)(165) 113

Lysine incorporation
Pattern of --- into elastin of growing chick aorta (Sandberg, Cleary)(154) 411

Lysine-rich histones
Studies on the biosynthesis of very --- in isolated nuclei (Reid, Stellwagen, Cole) (155) 593

Lysolecithin
Intestinal absorption of lecithin and --- by lymph fistula rats (Nilsson)(152) 379

Lysolecithin inhibition
--- of mitochondrial metabolism (Honjo, Ozawa)(162) 624

Lysolecithin metabolism
Lecithin metabolism and --- by isolated mucosal cells of the toad bladder (Rosenbloom, Elsbach)(164) 72

Lysolecithinase activity
Plasma --- in pregnancy (Portman et al.) (167) 610

Lysophosphatic acyl-hydrolase
Phospholipases in arterial tissue. II. Phosphatide acyl-hydrolase and --- activity in human and rat arteries (Eisenberg, Stein, Stein)(164) 205

Lysophosphatidylethanolamine
Acylation of --- by soluble enzyme(s) released from mitochondria after sonication (Turkki, Glenn)(152) 104

Lysophospholipase
Isolation of ---, free of phospholipase activity, from rat brain (Leibovitz, Gatt) (164) 439

Lysophospholipase
Specificity of rat liver --- (Van den Bosch et al.)(164) 215

Lysosomal enzyme activity
--- in rat and beef skeletal muscle (Stagni, De Bernard)(170) 129

Lysosomal localization
--- of sphingolipid hydrolases (Weinreb, Brady, Tappel)(159) 141

Lysosomes
Activation and stability of acid phosphatase from --- (Verity, Brown)(151) 284

Lysosomes
Effect of vitamins A and K on colon --- (Perumal, Lakshmanan, Cama)(170) 399

Lysosomes
Separation of mitochondria, peroxisomes and --- by zonal centrifugation in a Ficoll gradient (Brown)(162) 152

Lysozyme
--- adsorption and activity in urea solutions (James Jr., Hilborn)(151) 279

Lysozymes
Apparent affinity constants of --- from different origins for Micrococcus lysodeikticus cells (Locquet, Saint-Blancard, Jollès) (167) 150

Lysozymes
Comparative behaviour of six different --- in the presence of an inhibitor (Jollès et al.) (151) 532

Lysyl acetylation
Effect of a competitive inhibitor on the tyrosyl acetylation and --- of staphylococcal nuclease (Cuatrecasas, Fuchs, Anfinsen) (159) 417

α-Lyxofuranosyl derivatives of thymine
Specificity of pancreatic ribonuclease towards 2',3'-cyclic phosphates derived from --- (Holý, Šorm)(161) 264

M

- α_1-Macroglobulin
  - Biochemistry of rabbit ---. IV. Effect on the esterase activity of trypsin and chymotrypsin (Berthillier, Got, Bertagnolio)(170) 140
- α_2-Macroglobulin
  - Isolation and properties of γ inhibitor: An equine --- sub-fraction (Pepper)(156) 327
- α_2-Macroglobulin
  - Molecular alteration of --- by aliphatic amines (Steinbuch et al.)(154) 228
- α_2-Macroglobulin
  - Studies on the structure of human ---. I. Preparation of human α_2-macroglobulin (Razafimahaleo, Bourrillon)(154) 397
- α_2-Macroglobulin
  - Studies on the structure of human --- (α_2M). II. Preparation and properties of the glycopeptides isolated from an enzymatic hydrolysate of α_2M (Bourrillon, Razafimahaleo, Parnaudeau)(154) 405
- Macrolides
  - Mode of action of --- (Mao, Wiegand) (157) 404
- Magnesium-activated ATPase
  - Effect of alkali metal ions on the --- activity of reconstituted actomyosin (Katz)(162) 79
- Magnesium-activated ATPase
  - Levels of (Na^+-K^+)-activated ATPase and --- activity in bovine and feline corneal endothelium and epithelium (Rogers)(163) 50
- Magnesium-calcium-activated ATPase
  - Elicitation of the brain microsomal --- by digitonin treatment (Nakamura, Konishi) (159) 206
- Magnesium-limited continuous culture
  - Studies on the ribosomes and RNA's of Aerobacter aerogenes grown at different rates in --- (Young, Sykes)(169) 117
- Malate dehydrogenase
  - Heterogeneity of supernatant --- (Kulick, Barnes)(167) 1
- Malate dehydrogenase
  - Nature of the isozymes of rat liver mitochondrial --- (Mann, Vestling)(159) 567
- Malate dehydrogenase (decarboxylating) (NADP)
  - --- and α-glycerophosphate oxidase in the developing rat (Hemon)(151) 681
- Malate dehydrogenase (decarboxylating) (NADP)
  - --- isoenzymes of Opuntia stem tissue: Mitochondrial, chloroplast, and soluble forms (Mukerji, Ting)(167) 239
- Malate oxidation
  - Use of a ubiquinone-deficient mutant in the study of --- in Escherichia coli (Cox, Snoswell, Gibson)(153) 1
- Malate synthase
  - Fluoroacetyl-CoA as a substrate for --- (Powell, Beevers)(151) 708
- Malonamide
  - Kinetics of --- -induced haemolysis of mammalian erythrocytes. I. The Arrhenius activation parameters (Coldman, Good) (150) 194
- Malonamide
  - Kinetics of --- -induced haemolysis of mammalian erythrocytes. II. The Eyring activation parameters (Coldman, Good) (150) 206
- Malonyl-CoA-independent fatty acid synthesis
  - Mechanism of ---. I. The mechanism of elongation of long-chain fatty acids by acetyl-CoA (Seubert et al.)(164) 498
- Mammary cells
  - Biosynthesis of secretory lipids from [2-^{14}C]acetate by bovine --- in vitro (Kinsella, McCarthy)(164) 518
- Mammary cells
  - Incorporation of [$^{14}C_3$]glycerol into lipids by dispersed bovine --- (Kinsella)(164) 540
- Mammary cells
  - Lipid composition and secretory activity of bovine --- in vitro (Kinsella, McCarthy) (164) 530
- Manganese
  - Site of --- function in photosynthesis (Cheniae, Martin)(153) 819
- Manganese deficient
  - Fluorescence properties of chloroplasts from --- and mutant tobacco (Homann) (162) 545
- Manganese mesoporphyrin
  - Preparation of mesoporphyrin IX and copper mesoporphyrin and --- complexes of apohaemoglobin (Simo, Javaherian, Fabry) (160) 118
- D-Mannitol:NAD^+ oxidoreductase
  - Crystalline --- from Leuconostoc mesenteroides (Sakai, Yamanaka)(151) 684
- Mannose diphosphates
  - Glucose diphosphate and --- in erythrocytes (Bartlett)(156) 231
- Megascolides cameroni
  - Biosynthesis of D-serine ethanolamine phosphate in the earthworm --- (Allen, Rosenberg)(152) 208
- Membrane
  - Characterization of the plasma membrane of Mycoplasma laidlawii. III. The formation and aggregation of small lipoprotein structures derived from sodium dodecyl sulphate-solubilized --- components (Engelman, Morowitz)(150) 376
- Membranes
  - Control of fatty acid synthesis in mitochondrial --- (Howard Jr.)(164) 448
- Membranes
  - Determination of molecular weights of microgram quantities of protein components from biological --- and other complex mixtures: Gel electrophoresis across linear gradients of acrylamide (Thorun, Mehl) (160) 132
- Membranes
  - Effects of a d.c. potential bias on the electrical properties of bimolecular lipid --- (Rosen, Sutton)(163) 226
- Membranes
  - Energy of formation of bimolecular lipid --- (Coster, Simons)(163) 234
- Membranes
  - Glucose permeability of lipid bilayer --- (Wood, Wirth Jr., Morgan)(163) 171
- Membranes

  Hexokinase activity and glycolytic capacity of plasma --- of hepatomas (Davidova, Shapot, Solowjeva)(158) 303
Membranes
  Hydrogen ions in hydrophobic --- (Ilani, Tzivoni)(163) 429
Membrane
  Intra --- location of alcohol anesthetics (Schneider)(163) 451
Membrane
  Isolation of a --- fraction enriched in nerve-end membranes from rat brain by zonal centrifugation (Cotman, Mahler, Anderson)(163) 272
Membrane
  Isolation of an organ-specific protein antigen from cell-surface --- of rat liver (Neville Jr.)(154) 540
Membrane
  Isolation of rat liver plasma --- fragments (Graham, Higgins, Green)(150) 303
Membranes
  Phosphatidate phosphohydrolase activity in liver cell surface --- (Coleman)(163) 111
Membrane
  Physical state of cytochrome oxidase: Relationship between --- formation and ionic strength (Sun et al.)(153) 804
Membranes
  Properties of an ATP-binding protein isolated from --- of nerve endings (Abood, Matsubara)(163) 539
Membranes
  Properties of black lipid --- of chloroplast pigments (Ting et al.)(163) 439
Membranes
  Protein patterns of erythrocyte --- from different mammalian species (Zwaal, Van Deenen)(163) 44
Membranes
  Sarcoplasmic reticulum. V. The structure of sarcoplasmic reticulum --- (Martonosi) (150) 694
Membranes
  Selective transport of ions through bimolecular phospholipid --- (Liberman, Topaly) (163) 125
Membrane
  Separation by density gradient centrifugation of two types of --- from spheroplast membrane of Escherichia coli (Miura, Mizushima)(150) 159
Membranes
  Studies on a material which induces electrical excitability in bimolecular lipid ---. I. Production, isolation, gross indentification and assay (Kushnir)(150) 285
Membrane
  Studies on the organization of the brush border in intestinal epithelial cells. V. Subfractionation of enzymatic activities of the microvillus --- (Eichholz)(163) 101
Membrane of egg cell
  Elastic-mathematical theory of cells and mitochondria in swelling process. V. Transformation of cortical granule --- of Strongylocentrotus purpuratus in subelastic and elastic swelling (Mela)(150) 541
Membrane enzyme systems
  ---: Molecular size determinations by radiation inactivation (Kepner, Macey) (163) 188
Membrane lipids
  Synthesis of lipids by liver plasma membranes. Incorporation of acyl-CoA derivatives into --- in vitro (Trams, Stahl, Robinson)(163) 459
Membrane modification
  Effect of --- of human erythrocytes by enzyme treatment on their partition in aqueous dextran-polyethylene glycol two-phase systems (Walter, Coyle)(165) 540
Membrane pores
  Permeability of Valonia to water and solutes: Apparent absence of aqueous --- (Gutknecht)(163) 20
Membrane potential
  Measurement of the --- and evidence for active transport of ions in Chlorella pyrenoidosa (Barber)(150) 618
Membrane potential
  Temperature dependence of the --- and resistance in Nitella translucens (Hogg, Williams, Johnston)(150) 640
Membrane resistance
  Simplified method for measuring --- in Nitella translucens (Hogg, Williams, Johnston)(150) 518
Membrane RNA
  Chemical fractionation of microsomes and metabolic activity of --- from rat liver (Tulegenova, Rodionova, Shapot)(166) 265
Membrane transport
  Immediate effects of gibberellic acid on --- in young pea seedlings (Lüttge, Bauer, Köhler)(150) 452
Membranifibrils
  --- in mitochondrial cristae and chloroplast grana (Stiles, Wilson, Crane)(162) 631
Membranous structures
  Effect of heavy water on the --- of the proximal and distal convoluted tubules of the mouse (Matty, Deutsch)(163) 14
Mercurials
  Interaction of --- with helical and random polyribouridylic acid (Millar)(166) 628
H-Meromyosin
  Influence of β-mercaptoethanol on the aggregation state and ATPase activity of the --- of the bovine carotid (Gaspar-Godfroid) (167) 622
Mesophilic bacteria
  Adaptation of --- to growth at elevated temperatures (Dowben, Weidenmüller) (158) 255
Mesophilic bacteria
  Studies of the DNA from --- and thermophilic bacteria (Stenesh, Roe, Snyder) (161) 442
Mesoporphyrin IX
  Preparation of --- and copper mesoporphyrin and manganese mesoporphyrin complexes of apohaemoglobin (Simo, Javaherian, Fabry)(160) 118
Mesotocine
  Neurohypophyseal hormones of reptiles. Isolation of --- and vasotocine from the viper Vipera aspis (Acher, Chauvet, Chauvet) (154) 255
Messenger RNA
  Characterization of --- in protoplasts of Saccharomyces carlsbergensis (Hartlief, Koningsberger)(166) 512
Messenger RNA
  Effect of T_4 infection on --- synthesis in Escherichia coli (Rouvière et al.)(166) 94
Messenger RNA
  Kinetic aspects of ribosomal RNA and --- formation in young rat brain (Murthy) (166) 115

Messenger RNA
  Studies on --- from peanut plants: In vitro polyribosome formation and protein synthesis (Jachymczyk, Cherry) (157) 368
Messenger RNA
  Studies on the size of the --- transcribed from the histidine operon during simultaneous and sequential derepression (Venetianer et al.) (166) 124
Messenger RNA
  Ultraviolet inactivation of Escherichia coli ribosomes. II. Effects of --- binding on ultraviolet sensitivity of ribosomes (Tokimatsu et al.) (169) 363
Metabolites assay
  New principle for the --- involving the combined effects of isotope dilution and enzymatic catalysis (Newsholme, Taylor) (158) 11
Metal–ATP binding
  ---. I. Thermodynamic data for adenosine--silver binding (Phillips, George) (162) 73
Metamorphosis
  Liver tryptophan pyrrolase activity during thyroxine-induced --- of Rana catesbeiana (Paik, Christinzio, Kim) (167) 209
Methionine
  Dye-sensitized selective photooxidation of --- (Jori et al.) (154) 1
[Me-^{14}C]Methionine
  Distribution of methyl label into molecular species of liver lecithins from female rats injected with --- (Tinoco et al.) (164) 129
[Me-^{14}C]Methionine
  Effects of estradiol and testosterone on the incorporation and distribution of --- methyl in rat liver lecithins (Lyman et al.) (152) 197
L-[Me-^{14}C]Methionine
  Incorporation of --- and [Me-^{3}H]choline into lung phosphatides (Spitzer, Morrison, Norman) (152) 552
Methionine homolog
  2-Amino-6-(methylthio)caproic acid, a --- and precursor of progoitrin (Lee, Serif) (165) 569
Methionine transfer RNA$_F$
  Purification of Escherichia coli --- and methionine transfer RNA$_M$ and studies on their biophysical and biochemical properties (Seno, Kobayashi, Nishimura) (169) 80
Methionine transfer RNA$_M$
  Purification of Escherichia coli methionine transfer RNA$_F$ and --- and studies on their biophysical and biochemical properties (Seno, Kobayashi, Nishimura) (169) 80
Methionyl transfer RNA
  Studies on --- synthetase. III. Enzyme dependence for maximum --- formation (Svensson) (167) 179
Methionyl transfer RNA synthetase
  Studies on ---. III. Enzyme dependence for maximum methionyl-tRNA formation (Svensson) (167) 179
Methotrexate
  Effect of --- on pyrimidine metabolism in regenerating rat liver (Coward, Morse Jr. Gentry) (155) 605
Methylated albumin kieselguhr
  Studies of wheat-embryo rRNA. I. Behaviour on --- columns (Singh, Keller) (169) 150
Methylated bases
  --- in liver nucleic acids from rats treated with dimethylnitrosamine (Lawley et al.) (157) 646
Methylation
  --- of RNA by mouse organs and tumours: Ionic stimulation in vitro (Kaye, Leboy) (157) 289
N-O-Methylation of hydroxamic acids
  Enzymatic --- (Lotlikar) (170) 468
S-(1-Methyl-2-carboxyethyl)cysteine
  3-(S-Cysteinyl)glutaric acid, --- and S-(1,2-dimethyl-2-carboxyethyl)cysteine in human urine (Kodama) (165) 432
20-Methylcholanthrene
  Influence of --- on 17β-estradiol binding to 9.5-S receptor molecule from rat uterus (Hierowski, Madoń) (170) 425
Methylene blue
  Studies on the photodynamic reaction of purines and purine analogues with --- (Friedman) (166) 1
3-O-Methyl fluorescein phosphate
  Studies on the stability of --- (Waters, Summer, Hill) (159) 420
Methyl α-D-glucopyranoside
  Interaction of concanavalin A with --- (Yariv, Kalb, Levitzki) (165) 303
6-O-Methyl-D-glucose
  Intracellular localization of a --- containing soluble polysaccharide from Mycobacterium tuberculosis (Lornitzo, Goldman) (158) 329
2-Methylheptan-6-one
  Androgen biosynthesis. I. Enzymatic cleavage of the cholesterol side-chain to dehydroepiandrosterone and --- (Jungmann) (164) 110
3-Methylhistidine
  --- in blood plasma of sheep (Leibholz) (170) 432
N-Methylhydroxylamine
  Effect of hydroxylamine and --- on beef brain microsomal (Na$^+$ + K$^+$)-ATPase (Chignell, Titus) (159) 345
N-Methyl-N'-nitro-N-nitroguanidine
  Reaction of --- and N-methyl-N-nitroso-p-toluenesulphonamide with DNA in vitro (McCalla) (155) 114
N-Methyl-N'-nitro-N-nitrosoguanidine
  Reaction of --- with protein (Sugimura et al.) (170) 427
N-Methyl-N-nitroso-p-toluenesulphonamide
  Reaction of N-methyl-N'-nitro-N-nitroguanidine and --- with DNA in vitro (McCalla) (155) 114
5-Methyl phenazinium radical
  Electron paramagnetic resonance observation on biogenic semiquinone radical and --- (Ishizu et al.) (165) 283
Methylprednisolone-treated
  (Na$^+$-K$^+$)-activated ATPase in renal cell membranes of normal and --- rats (Manitius, Bensch, Epstein) (150) 563
2-Methyl-2-n-propyl-1,3-propanedioldicarbamate
  Action of --- on porphyrin and haem synthesis in Achromobacter metalcaligenes (Doss) (170) 461
2'-O-Methylribonucleotide
  Bias of the distribution of the --- constituents of yeast transfer RNA (Morisawa, Chargaff) (169) 285
β-Methyl-substituted fatty acid
  α-Oxidation of a --- in guinea-pig liver mitochondria (Stokke) (152) 213
4-Methylumbelliferyl-β-D-glycosides
  Identity of β-glucosidase, β-xylosidase and one of the β-galactosidase activities in hu-

  man liver when assayed with ---, Studies in cases of Gaucher's disease (Ockerman) (165) 59
Metmyoglobin
  Nuclear magnetic investigation of pre-denaturational conformational transition of --- in water solution (Atanasov, Derzhanski, Georgieva)(160) 255
Microbacterium lacticum
  Amino acid sequence of the murein of --- (Schleifer, Plapp, Kandler)(154) 573
Microbacterium lacticum
  Lipid composition of --- (Shaw)(152) 427
Micrococcal nuclease
  Conformation-dependent hydrolysis of DNA by --- (Wingert, Von Hippel)(157) 114
Micrococcal nuclease
  Degradation of thymus DNA and crab poly d(A–T) by --- in the presence of actinomycin D (Sulkowski, Laskowski Sr.)(157) 207
Micrococcus denitrificans
  Composition and properties of the membrane-bound respiratory chain system of --- (Scholes, Smith)(153) 363
Micrococcus denitrificans
  Isolation and properties of the cytoplasmic membrane of --- (Scholes, Smith)(153) 350
Micrococcus lysodeikticus
  Apparent affinity constants of lysozymes from different origins for --- (Locquet, Saint-Blancard, Jollès)(167) 150
Micrococcus lysodeikticus
  DNA methylated in vitro by a monofunctional alkylating agent as a substrate for a specific nuclease from --- (Strauss, Robbins)(161) 68
Micrococcus lysodeikticus
  Major attachment site for D-serine in the cell wall mucopeptide of --- (Whitney, Grula)(158) 124
Micrococcus lysodeikticus
  Membrane-associated ATPase activity from --- (Munoz et al.)(150) 531
Micrococcus lysodeikticus
  Properties of RNA synthesis in HeLa nuclei by --- or endogenous RNA polymerase (Summers, Mueller)(169) 316
Micrococcus sodonensis
  Role of potassium in the uptake of carbon dioxide by --- (Perry)(165) 538
Microelectrophoresis
  Immunological techniques following --- on polyacrylamide gel (Felgenhauer)(160) 267
Microelectrophoretical introduction
  Kinetics of the fluorescence response to --- of metabolites in the single living cell (Kohen et al.)(158) 185
Microsomal membranes
  Partial solubilization of protein and 5'-nucleotidase from --- of the rat liver by ultrasonic irradiation (Song et al.)(150) 300
Microsomal membranes
  Use of radioactive choline as a label for ---. I. Selectivity of label for endoplasmic reticulum and specificity for lecithin (Nagley, Hallinan)(163) 218
Microsomes
  Chemical fractionation of --- and metabolic activity of membrane RNA from rat liver (Tulegenova, Rodionova, Shapot) (166) 265
Microsomes
  Continuous recording of pH and pCa during calcium binding by muscle --- (Johnson, Pressman)(153) 500
Microsomes
  Non-specific nature of the nucleoside diphosphatase of rat liver --- (Penniall, Holbrook)(151) 700
Microsomes
  Relation between cumarin hydroxylase activity and the cytochrome P-450 content of rabbit-liver --- (Kratz)(165) 176
Microsomes
  Studies on estrogen regulation of cholesterol biosynthesis in rat liver --- (Mukherjee, Bhose)(164) 357
Microvillus membrane
  Incorporation of [1-^{14}C]glucosamine by rat intestinal --- (Forstner)(150) 736
Microvillus membrane
  Studies on the organization of the brush border in intestinal epithelial cells. V. Subfractionation of enzymatic activities of the --- (Eichholz)(163) 101
Milk fat
  Distribution of trans-unsaturated fatty acids in --- (Woodrow, DeMan)(152) 472
Milk fat
  Incorporation of [1-^{14}C]acetate into the aliphatic δ-lactones of ruminant --- (Walker, Patton, Dimick)(152) 445
Minor bases
  Presence of --- in DNA of phages DD7 and S_d and their hosts (Nikolskaya et al.) (155) 626
Misgurnus fossilis
  Rate of RNA synthesis in haploid and diploid embryos of loach (---) (Kafiani et al.) (169) 274
Mitochondria
  Accumulation of substrates by --- (Van Dam, Tsou)(162) 301
Mitochondria
  Action of Dio-9: Energy-linked swelling of rat-liver --- (Fisher, Guillory)(162) 182
Mitochondria
  Acylation of lysophosphatidylethanolamine by soluble enzyme(s) released from --- after sonication (Turkki, Glenn)(152) 104
Mitochondria
  Amino acid incorporation by isolated --- in the presence of cycloheximide (Loeb, Hubby)(166) 745
Mitochondria
  Arginine accumulation by dog kidney cortex --- (Keller)(153) 113
Mitochondria
  Binding of nucleotides to "structural protein" of wild-type and respiration-deficient yeast --- (Tuppy, Swetly)(153) 293
Mitochondria
  Biogenesis of ---. IV. The differentiation of mitochondrial and cytoplasmic protein synthesizing systems in vitro by antibiotics (Lamb, Clark-Walker, Linnane)(161) 415
Mitochondria
  Characteristics of cytochrome b_5 from outer membranes of rat liver --- (Davis, Kreil) (162) 627
Mitochondria
  Citrulline synthesis in --- with exogenous ATP (Graafmans, Charles, Tager)(153) 916
Mitochondria
  Comparative study of cytochrome ratios in --- from organs of the rat, chicken and guinea pig (Williams Jr.)(162) 175
Mitochondria
  Coupling factors of oxidative phosphorylation in --- (Vallejos, Van den Bergh, Slater)

(153) 509
Mitochondria
    Effect of filipin on rat liver and yeast --- (Balcavage et al.)(162) 525
Mitochondria
    Effect of monovalent cations on the dinitrophenol-induced ATPase of rat-liver --- (Amons, Van den Bergh, Slater)(162) 452
Mitochondria
    Elastic-mathematical theory of cells and --- in swelling process. V. Transformation of cortical granule membrane of egg cell of Strongylcentrotus purpuratus in subelastic and elastic swelling (Mela)(150) 541
Mitochondria
    Elastic-mathematical theory of cells and --- in swelling process. VI. Ultrastructure of membrane region in the egg cell of the sea urchin (Strongylocentrotus purpuratus) in subelastic and elastic swelling (Mela) (150) 553
Mitochondria
    Evidence of a permeability barrier for α-oxoglutarate in rat liver --- (De Haan, Tager)(153) 98
Mitochondria
    Fatty acid synthesis by chain elongation in rat-liver --- (Quagliariello, Landriscina, Coratelli)(164) 12
Mitochondria
    Fatty acid synthesis in ---. Elongation of short-chain fatty acids and formation of unsaturated long-chain fatty acids (Christ) (152) 50
Mitochondria
    Ferrochelatase activity of yeast --- (Labbe, Volland, Chaix)(159) 527
Mitochondria
    Formation of propionylcarnitine in isolated rat liver --- (Bøhmer)(164) 487
Mitochondria
    Inhibition by anions of dinitrophenol-induced ATPase of --- (Veldsema-Currie, Slater)(162) 310
Mitochondria
    Inhibition of succinate oxidation in isolated --- by uncouplers (Papa et al.)(153) 306
Mitochondria
    Ion transport in heart ---. XIII. The effect of ethylenediaminetetraacetate on monovalent ion uptake (Settlemire, Hunter, Brierley)(162) 487
Mitochondria
    Ion transport and phospholipid labelling in rat liver --- (Fang, Rasmussen)(153) 83
Mitochondria
    Isolation and characterization of a rapidly labelled RNA from mouse liver --- (Comorosan, Gaspar, Sandru)(166) 394
Mitochondria
    --- with loosely and tightly coupled oxidative phosphorylation in skeletal muscle (Hulsmann, De Jong, Van Tol)(162) 292
Mitochondria
    Metabolism of D- and L-lysine in the intact rat, perfused liver and liver --- (Grove, Henderson)(165) 113
Mitochondria
    Neonatal hepatic mitochondrocuprein. III. Solubilization of the copper and protein from --- of newborn liver by reduction with mercaptoethanol (Porter)(154) 236
Mitochondria
    Oxidation of 5β-cholestane-3α,7α,12α-triol by rat liver --- (Okuda, Hoshita)(164) 381
Mitochondria
    Oxidation of the geometric isomers of $\Delta^{9,12}$-octadecadienoic acid by rat liver --- (Anderson)(152) 531
Mitochondria
    α-Oxidation of a β-methyl-substituted fatty acid in guinea-pig liver --- (Stokke) (152) 213
Mitochondria
    Oxidative phosphorylation in brown adipose tissue --- (Guillory, Racker)(153) 490
Mitochondria
    Oxidative phosphorylation in yeast. I. Isolation and properties of phosphorylating --- from stationary phase cells (Kováč, Bednárová, Greksák)(153) 32
Mitochondria
    α-Oxobutyrate oxidation by isolated mammalian --- (Ciman, Siliprandi)(162) 164
Mitochondria
    Phosphorylation of structural protein catalyzed by rat-liver --- (Pinna, Moret) (153) 494
Mitochondria
    Properties of Saccharomyces cerevisiae -- prepared by a mechanical method (Balcavage, Mattoon)(153) 521
Mitochondria
    Separation of ---, peroxisomes and lysosomes by zonal centrifugation in a Ficoll gradient (Brown)(162) 152
Mitochondria
    Stoicheiometry of the energy-linked nicotinamide nucleotide transhydrogenase reaction on intact rat-liver --- (Papa et al.) (153) 303
Mitochondria
    Structural changes in --- induced by uncoupling reagents. The response to snake venom phospholipase A (Weinbach, Garbus)(162) 500
Mitochondria
    Studies on corticosteroidogenesis. V. 11β-Hydroxylation of deoxycorticosterone by --- incubated with malate, supernatant fraction and supernatant fraction plus pyruvate plus CO_2 (Péron, Caldwell)(164) 396
Mitochondria
    Studies on the functional relationship between the phosphopyruvate synthesis and the substrate level phosphorylation in guinea-pig liver --- (Ishihara, Kikuchi) (153) 733
Mitochondria
    Ultrastructure of sonic and digitonin fragments from beef heart --- (Malviya et al.) (162) 195
Mitochondrial cristae
    Membranifibrils in --- and chloroplast grana (Stiles, Wilson, Crane)(162) 631
Mitochondrial DNA
    ---. III. Electron microscopy of DNA released from mitochondria by osmotic shock (Van Bruggen et al.)(161) 402
Mitochondrial DNA
    Number of superhelical turns in --- (Ruttenberg et al.)(157) 429
Mitochondrial electron transport
    Studies on the mechanism of inhibition of the --- by antimycin. I. Reversal of the inhibition by diethyl ether extraction (Kaniuga, Gardas, Bryla)(153) 60
Mitochondrial enzyme
    Development-dependent --- activities in castes of the honey bee (Osanai, Rembold)

(162) 22

- Mitochondrial lipids
  - Cooperation between mitochondria and the rest of the cell in the turnover of --- in apple parenchyma (Mazliak, Stoll, Abderlkader)(152) 414
- Mitochondrial membranes
  - Comparative X-ray diffraction and electron-microscope studies of isolated --- (Thompson, Coleman, Finean)(150) 405
- Mitochondrial membranes
  - Control of fatty acid synthesis in --- (Howard Jr.)(164) 448
- Mitochondrial membrane
  - Specificity of fatty acid composition of --- phospholipids (Huet, Lévy, Pascaud) (150) 521
- Mitochondrial metabolism
  - Lysolecithin inhibition of --- (Honjo, Ozawa)(162) 624
- Mitochondrial metabolism
  - Specificity of the action of parathyroid hormone upon ---: Cyanogen bromide-derived parathyroid-hormone peptides (Goodman, Rasmussen)(153) 749
- Mitochondrial NAD(P) transhydrogenase
  - Absence of NADH:NAD+ oxidoreductase activity in --- (Kramar, Müller, Salvenmoser)(162) 289
- Mitochondrial respiration
  - Nature of electron transport and energy transport in mitochondria. II. Multiple activation of --- (Nijs)(153) 70
- Mitochondrocuprein
  - Neonatal hepatic ---. III. Solubilization of the copper and protein from mitochondria of newborn liver by reduction with mercaptoethanol (Porter)(154) 236
- Molecular weights
  - Determination of --- of microgram quantities of protein components from biological membranes and other complex mixtures: Gel electrophoresis across linear gradients of acrylamide (Thorun, Mehl) (160) 132
- Molecular weight
  - Determination of the --- of a protein most closely corresponding to its amino acid analysis (Delaage)(168) 573
- Moniezia expansa
  - Respiratory components of --- (Cestoda) (Cheah)(153) 718
- Monoacyl phosphatidylcholines
  - Acylation of isomeric --- (Van den Bosch et al.)(152) 694
- Monoamine oxidase
  - Prosthetic groups of pig brain mitochondrial --- (Tipton)(159) 451
- Monoamine oxidases
  - Studies of ---. I. Purification and properties of the rabbit liver mitochondrial enzyme (Gabay, Valcourt)(159) 440
- Monoamine oxidase
  - Thyroidal biosynthesis of iodothyronines. II. General characteristics and purification of mitochondrial --- (Fischer, Schulz, Oliner)(159) 460
- Monochrysis lutheri
  - Characterization of phospholipase C from a marine planktonic alga --- (Bilinski, Antia, Lau)(159) 496
- Monoenoic fatty acids
  - --- and docosahexaenoic fatty acids of a heterotrophic dinoflagellate (Harrington, Holz Jr.)(164) 137
- Monohydroxy-polyenic fatty acids
  - Formation of --- from lipid peroxides by a glutathione peroxidase (Christophersen) (164) 35
- Monoiodotyrosine
  - Incorporation of radioactivity from --- by soluble systems (Soffer)(155) 536
- Monolayers
  - Differential effect of sodium and potassium on calcium adsorption to stearic acid --- (Yamauchi et al.)(150) 181
- Monomethyl phosphatidate
  - --- and dimethyl phosphatidate from different subtypes of choline and ethanolamine glycerophosphatides (Renkonen)(152) 114
- Monomolecular layers
  - Interaction of polyene antibiotics with single and mixed lipid --- (Demel et al.) (150) 1
- 2-Monopalmitin
  - Biosynthesis of triglycerides from doubly labelled --- in the intestinal mucosa of the rat (Paris, Clement)(152) 63
- Monosaccharides
  - Formation of dicarbonyls from --- and arsenite (Jellum)(170) 430
- Monosomes
  - Ribonucleoprotein interaction with mammalian --- (Armentrout, Weisberger) (161) 180
- Montmorillonite
  - Interaction between colloidal --- and cells of Rhizobium species with different ionogenic surfaces (Marshall)(156) 179
- Mucilage
  - Enzymatic degradation of linseed ---. I. Isolation and characterization of extracellular enzyme produced by Aspergillus niger (Kaláč, Rexová)(167) 590
- Mucins
  - Water vapor sorption of bovine and porcine submaxillary --- (Bettelheim, Block) (165) 405
- Mucopeptide
  - Major attachment site for D-serine in the cell wall --- of Micrococcus lysodeikticus (Whitney, Grula)(158) 124
- Mucopolysaccharides
  - Biosynthesis of glycosaminoglycans (---) in human leucocytes (Olsson, Gardell, Thunell)(165) 309
- Mucopolysaccharides
  - Biosynthesis of glycosaminoglycans (---) in leukemic myeloid cells (Olsson)(165) 324
- Mucopolysaccharides
  - Cardiovascular studies on copper-deficient swine. XI. --- and the mechanical properties of the aorta (Coulson, Linker) (158) 117
- Mucopolysaccharides
  - Content of glycosaminoglycans --- in mouse fetus and placenta (Švejcar)(165) 84
- Mucopolysaccharides
  - Periodate oxidation, pK_a and conformation of hexuronic acids in polyuronides and --- (Scott)(170) 471
- Mucopolysaccharide excretion
  - Non-sulphated acid --- in normal male children and adults (Orii)(170) 204
- Mucoprotein
  - Viscosity of Tamm-Horsfall --- (Stevenson) (160) 296
- Mucor rouxii
  - Chemical composition of sporangiophore walls of --- (Bartnicki-Garci, Reyes)(165) 32

- Mucor rouxii
  - Polyuronides in the cell walls of --- (Bartnicki-Garcia, Reyes)(170) 54
- Mucosa
  - Phospholipid turnover and ultrastructural changes in resting and secreting bullfrog gastric --- (Kasbekar, Forte, Forte)(163) 1
- Mucosal cells
  - Lecithin and lysolecithin metabolism by isolated --- of the toad bladder (Rosenbloom, Elsbach)(164) 72
- Murein
  - Amino acid sequence of the --- of Microbacterium lacticum (Schleifer, Plapp, Kandler)(154) 573
- Murex trunculus
  - Effect of photooxidation and histidine reagents on --- haemocyanin (Wood, Bannister)(154) 10
- Murine leukemia virus
  - RNA polymerase activity following infection with --- (Lin, Rich)(157) 310
- Muscle
  - Stimulation of ^{45}Ca efflux from smooth --- by extracellular Ca^{2+} (Van Breemen, Van Breemen)(163) 114
- Muscle
  - Studies of --- development. IV. Some characteristics of RNA polymerase activity in isolated nuclei from developing chick muscle (Marchok, Wolff)(155) 378
- Muscle
  - Subunit structure of fibrous --- proteins as determined by osmometry (McCubbin, Kay)(154) 239
- Muscle fiber
  - Sodium influx into denervated rat diaphragm --- (Adamič)(163) 137
- Muscle proteins
  - Birefringence of --- and the problem of structural birefringence (Cassim, Tobias, Taylor)(168) 463
- Muscle proteins
  - Fluorescence and protein structure. XIV. Tyrosine fluorescence in helical --- (Cowgill)(168) 417
- Muscle protein
  - Fluorescence and protein structure. XV. Tryptophan fluorescence in a helical --- (Cowgill)(168) 431
- Muscle proteins
  - Fluorescence and protein structure. XVI. Detergents bound to --- (Cowgill)(168) 439
- Muscle proteins
  - Ultraviolet dichroism of --- (Oikawa, Kay, McCubbin)(168) 164
- Mussel spermatozoa
  - Studies on sphingolipids of fresh-water --- (Higashi, Hori)(152) 568
- Mutation
  - Oxidative phosphorylation in yeast. IV. Combination of a nuclear --- affecting oxidative phosphorylation with cytoplasmic mutation to respiratory deficiency (Kováčová, Irmlerová, Kováč)(162) 157
- Mycobacteria
  - Significance of the size of the polysaccharide portion for adjuvanticity of a peptidoglycolipid (wax D) of --- (Koga et al.)(158) 144
- Mycobacterial cell
  - Chemical analyses of --- walls (Kanetsuna)(158) 130
- Mycobacterium tuberculosis
  - Intracellular localization of a 6-O-methyl-D-glucose containing soluble polysaccharide from --- (Lornitzo, Goldman)(158) 329
- Mycobacterium tuberculosis
  - Structure of the polysaccharide of wax D from human strain of --- (Vilkas, DeLaumeny, Nacasch)(158) 147
- Mycodextranase
  - Structure of the tetrasaccharide produced by the hydrolysis of nigeran by the enzyme --- (Tung, Nordin)(158) 154
- Mycoplasma laidlawii
  - Characterization of the plasma membrane of ---. III. The formation and aggregation of small lipoprotein structures derived from sodium dodecyl sulphate-solubilized membrane components (Engelman, Morowitz)(150) 376
- Mycoplasma laidlawii
  - Characterization of the plasma membrane of ---. IV. Structure and composition of membrane and aggregated components (Engelman, Morowitz)(150) 385
- Myelin
  - Evidence for a specific ganglioside fraction closely associated with --- (Suzuki, Poduslo, Poduslo)(152) 576
- Myelin
  - Physical studies of ---. I. Thermal analysis (Ladbrooke et al.)(164) 101
- Myelin turnover
  - --- in the adult rat (Smith)(164) 285
- Myeloblastosis virus
  - Characterization of avian leucosis group-specific antigen from avian --- (Allen)(154) 388
- Myoglobin
  - Nuclear magnetic investigation of pre-denaturational conformational transition of met--- in water solution (Atanasov, Derzhanski, Georgieva)(160) 255
- Myoglobin
  - Paramagnetic anisotropy measurements on acid ferrimyoglobin and ferri--- fluoride (Uenoyama et al.)(160) 159
- Myokinase
  - Interference of --- in ATP determination by luciferase assay (De Leo, Giovannozzi-Sermanni)(170) 208
- Myosin
  - Effect on cardiac --- of diverse methods of preparation (Vierling et al.)(160) 53
- Myosin
  - Isolation and properties of an enzymatically active fragment from papain-digested --- (Nihei, Kay)(160) 46
- Myosin
  - Reaction of --- with 1-fluoro-2,4-dinitrobenzene (Bailin, Bárány)(168) 282
- Myosin
  - Reactivity of actomyosin and --- with 1-fluoro-2,4-dinitrobenzene in vivo and in vitro (Bárány, Bárány, Bailin)(168) 298
- Myosin B
  - Isolation, purification and characterization of --- from Myxomycete plasmodium (Hatano, Tazawa)(154) 507
- Myosin ATPase
  - Effect of trinitrophenylation on --- (Fábián, Mühlrad)(162) 596
- Mytilus edulis
  - Somatic histones from --- (Cozcolluela, Subirana)(154) 242
- Myxovirus
  - Inhibition of --- by modified RNA (Louisot et al.)(155) 38

N

NAD
One-electron reactions in biochemical systems as studied by pulse radiolysis. I. --- and related compounds (Land, Swallow) (162) 327

NAD$^+$
Reactions of --- and pyruvate (Di Sabato) (167) 646

NAD biosynthesis
Comparative study of the regulation of --- (Saxton et al.)(156) 77

NAD biosynthesis
Studies on the --- in the brain (Deguchi et al.)(158) 382

NADH-benzyl viologen reductase
Properties of an --- from Azotobacter vinelandii (Nagai, Elleway, Nicholas)(153) 766

NADH dehydrogenase
Factors affecting the cation requirement of a halophilic --- (Hochstein, Dalton) (167) 638

NADH dehydrogenase
Preparation and properties of the membranal --- from Escherichia coli (Gutman, Schejter, Avi-Dor)(162) 506

NADH dehydrogenase
Studies on the respiratory chain-linked ---. I. Effect of diethyl ether on particulate --- (Kaniuga, Gardas, Jakubiak)(153) 317

NADH:NAD$^+$ oxidoreductase
Absence of --- activity in mitochondrial NAD(P) transhydrogenase (Kramar, Müller, Salvenmoser)(162) 289

NADH oxidase
Purification and properties of dichlorophenol-stimulated --- from rat uterus (Coleman, Bever)(151) 267

NAD kinase
--- from Azotobacter vinelandii cells. Reversible inactivation of the enzyme (Chung)(159) 490

NADPH
Mechanism of the respiratory stimulations in saponine-treated leucocytes. The KCN-insensitive oxidation of --- (Rossi, Zatti) (153) 296

NADPH dehydrogenase
Electron-nuclear double resonance from flavin free radicals on --- ("old yellow enzyme")(Ehrenberg, Eriksson, Hyde)(167) 482

NAD(P) transhydrogenase
Absence of NADH:NAD$^+$ oxidoreductase activity in mitochondria --- (Kramer, Müller, Salvenmoser)(162) 289

NAD reduction
Ferredoxin-dependent --- with hydrogen gas by subcellular preparations from the photosynthetic bacterium, Chromatium (Buchanan, Bachofen)(162) 607

Naphthyl esters
Use of --- as substrates in esterase determinations (Augustinsson)(159) 197

Native DNA
Rapid isolation of a regenerating rat liver DNA nucleotidyltransferase fraction which shows a preference for --- as primer (Bellair)(161) 119

Neocarzinostatin
C-terminal amino acid of --- (Maeda, Koyanagi, Ishida)(160) 249

Neocarzinostatin
Mode of action of ---: Requirement of protein synthesis for neocarzinostatin-mediated DNA degradation in Sarcina lutea (Ono et al.)(155) 616

Nephrectomized rats
Effects of L-carnitine on utilization of ketone bodies and glucose in eviscerated rats and in --- (Söling, Appels)(158) 162

Nerve
Motor --- and the activity of choline acetyltransferase in the skeletal muscle (Tuček) (170) 457

Nerve
Sodium-dependent uptake of calcium by crab --- (Baker, Blaustein)(150) 167

Nerve endings
Properties of an ATP-binding protein isolated from membranes of --- (Abood, Matsubara)(163) 539

Nerve-end membranes
Isolation of a membrane fraction enriched in --- from rat brain by zonal centrifugation (Cotman, Mahler, Anderson)(163) 272

Nerve membrane lipids
Tetrodotoxin interaction with squid --- (Villegas, Camejo)(163) 421

Nervous system
Regulation of glycogen metabolism in liver by the autonomic ---. II. Neural control of glycogenolytic enzymes (Shimazu, Amakawa)(165) 335

Nervous system
Regulation of glycogen metabolism in liver by the autonomic ---. III. Differential effects of sympathetic-nerve stimulation and of catecholamines on liver phosphorylase (Shimazu, Amakawa)(165) 349

Neuraminidases
Cytotoxic, haemolytic and phospholipase contaminants of commercial --- (Kraemer) (167) 205

Neuraminidase
Enzymatic hydrolysis of sphingolipids. VII. Hydrolysis of gangliosides by a --- from calf brain (Leibovitz, Gatt)(152) 136

Neuraminidase
--- in human intestinal mucosa (Ghosh, Kotowitz, Fishman)(167) 201

Neuraminidase
Influenza virus --- and the viral surface (Kendal, Biddle, Belyavin)(165) 410

Neurohypophyseal hormones
--- of reptiles. Isolation of mesotocine and vasotocine from the viper Vipera aspis (Acher, Chauvet, Chauvet)(154) 255

Neurohypophysis
Isolation and structure of a hexapeptide from pig --- (Schally, Barrett)(154) 595

Neurospora
Effect of sorbose on metabolism and morphology of --- (Crocken, Tatum)(156) 1

Neurospora crassa
Amino acid incorporation by cell-free extracts of --- (Lee, DeBusk)(157) 427

Neurospora crassa

  Effect of nitrogen source on cobalt toxicity in --- (Subramanian, Sarma)(156) 199
Neurospora crassa
  Evidence for two types of 18-S ribosomal RNA in --- (Michelson, Suyama)(157) 200
Neurospora crassa
  New gene which affects neutral and acidic amino acid uptake in --- (Jacobson, Metzenberg)(156) 140
Neurospora crassa
  Regulation of nitrate reductase and catalase by amino acids in --- (Subramanian, Padmanaban, Sarma)(151) 20
Neutron exposure
  Polyribosome reduction and recovery following --- of regenerating liver (Yatvin et al.)(169) 536
Nickel
  Role of zinc and --- in ribosome structure (Tal)(169) 564
Nickel ions
  Mechanism of the partial inhibition of fermentation in yeast by --- (Fuhrmann, Rothstein)(163) 331
Nicotinamide-adenine dinucleotide, see NAD
Nicotinamide-adenine dinucleotide phosphate, see NADP
Nicotinamide nucleotide transhydrogenase
  Stoicheiometry of the energy-linked --- reaction on intact rat-liver mitochondria (Papa et al.)(153) 303
Nicotinic acid
  Induction of adipose tissue lipoprotein lipase by --- (Nikkilä, Pykälistö)(152) 421
Nigeran
  Structure of the tetrasaccharide produced by the hydrolysis of --- by the enzyme mycodextranase (Tung, Nordin)(158) 154
Nisin
  Molecular weight distibution of --- (Jarvis, Jeffcoat, Cheeseman)(168) 153
Nitella translucens
  Simplified method for measuring membrane resistance in --- (Hogg, Williams, Johnston)(150) 518
Nitella translucens
  Temperature dependence of the membrane potential and resistance in --- (Hogg, Williams, Johnston)(150) 640
Nitella translucens
  Voltage-clamp and current-clamp studies on the action potential in --- (Williams, Bradley)(150) 626
Nitrate assimilation
  Effect of 2,4-dinitrophenol and other uncoupling agents on the --- and nitrite assimilation by Chlorella (Ahmed, Morris) (162) 32
Nitrate effect
  --- on Krebs cycle enzymes in various bacteria (Wimpenny, Warmsley)(156) 297
Nitrate reductase
  Regulation of --- and catalase by amino acids in Neurospora crassa (Subramanian, Padmanaban, Sarma)(151) 20
Nitrate reduction
  Enzymatic --- with flavin nucleotides reduced by a new chloroplast NADH-specific diaphorase (Paneque et al.)(162) 149
Nitrate reduction
  Metabolic pathways for --- in Escherichia coli (Cole, Wimpenny)(162) 39
Nitrite assimilation
  Effect of 2,4-dinitrophenol and other uncoupling agents on the nitrate assimilation and --- by Chlorella (Ahmed, Morris) (162) 32
Nitrite-reducing enzyme
  --- from Nitrosomonas europaea. Preliminary characterization with hydroxylamine as electron donor (Hooper)(162) 49
Nitrite reductase
  Properties of a --- from Pseudomonas denitrificans (Radcliffe, Nicholas)(153) 545
Nitrite reduction
  Cytochrome c_{552} and --- in Escherichia coli (Cole)(162) 356
Nitrobacter agilis
  Mechanism of oxidative phosphorylation in the chemoautotroph --- (Aleem)(162) 338
Nitrocellulose membrane
  Use of --- filters for DNA samples (Fishman, Schiff)(157) 419
Nitrogen fixation
  --- by purified components of the N_2-fixing system of Clostridium pasteurianum (Kennedy, Morris, Mortenson)(153) 777
Nitrogen mustard
  Relative reactivities for monofunctional --- alkylation nucleic acid components (Price et al.)(166) 327
Nitrogen mustard
  Reversible dissociation of Escherichia coli ribosomes by --- (Miyazawa, Dick, Tamaoki) (155) 193
Nitrosomonas europaea
  Nitrite-reducing enzyme from ---. Preliminary characterization with hydroxylamine as electron donor (Hooper)(162) 49
Nomenclature
  --- of lipids (IUPAC-IUB Commission on Biochemical Nomenclature)(152) 1
Nomenclature
  Tentative rules. Abbreviated --- of synthetic polypeptides (polymerized amino acids) (IUPAC-IUB Commission on Biochemical Nomenclature)(168) 1
Nomenclature
  Tentative rules for cyclitol --- (IUPAC-IUB Commission on Biochemical Nomenclature)(165) 1
Nomenclature
  Tentative --- rules. A one-letter notation for amino acid sequences (IUPAC-IUB Commission on Biochemical Nomenclature) (168) 6
Nomenclature of steroids
  IUPAC–IUB Tentative revised rules for the --- (IUPAC–IUB Commission on Biochemical Nomenclature and IUPAC Commission on the Nomenclature of Organic Chemistry)(164) 453
Nonsense mutant
  Amino acid replacements resulting from super-suppression of a --- of yeast (Gilmore, Stewart, Sherman)(161) 270
Noradrenalin
  Action of --- and oxytocin on the active sodium transport and the permeability of frog skin to water. Role of adenosine 3', 5'-monophosphate (Bastide, Jard)(150) 113
Noradrenalin
  Analysis of the dose-response relationships for the action of oxytocin and --- on frog skin and frog bladder (Jard, Bastide, Morel)(150) 124
Noradrenalin
  ----induced increase in hepatic cholesterol synthesis and its blockade by puromycin (Bortz)(152) 619

Nuclear magnetic resonance
Proton wide-line --- spectra of hydrated proteins(Blears, Danyluk)(154) 17

Nuclear magnetic resonance
--- studies of complexes between caffeine and aromatic donors (Hanna, Sandoval) (155) 433

Nuclear magnetic resonance
--- study of the interaction of purine and pyrimidine derivatives with acridine orange(Hruska, Danyluk)(161) 250

Nuclear magnetic resonance
---study of thermal effects upon base stacking in oligonucleotides: ApA > p (Hruska, Danyluk)(157) 238

Nuclear proteins
Gel electrophoresis of labelled --- from bovine leucocytes (Gray, Herzog, Steffensen) (157) 344

Nuclear RNA
Effect of parathyroid hormone in vivo on the labelling of --- from the intestinal mucosa and liver of vitamin D-deficient and normal chicks (Hamilton, Detert, Cohn) (155) 311

Nuclear RNA
Labelling in vivo of --- and cytoplasmic RNA of pigeon reticulocytes (Barlow, Mathias)(166) 379

Nuclear RNA
Studies on the sedimentation properties of ---, nucleolar RNA and extranucleolar nuclear RNA (Fujisawa, Muramatsu)(169) 175

Nuclear RNA
Studies on tissue specificities of --- and ribosomal RNA using the DNA × RNA hybridization technique (Bielka, Junghahn) (166) 698

Nucleases
Acceleration of senescence and of the increase of chromatin-associated --- in excised barley leaves by abscisin II and its reversal by kinetin (Srivastava)(169) 534

Nuclease
Conformation-dependent hydrolysis of DNA by micrococcal --- (Wingert, Von Hippel)(157) 114

Nuclease
Degradation of thymus DNA and crab poly d(A–T) by micrococcal --- in the presence of actinomycin D (Sulkowski, Laskowski Sr.) (157) 207

Nuclease
DNA methylated in vitro by a monofunctional alkylating agent as as substrate for a specific --- from Micrococcus lysodeikticus (Strauss, Robbins)(161) 68

Nuclease
Effect of a competitie inhibitor on the acetylation of tyrosyl and lysyl residues of staphylococcal --- (Cuatrecasas, Fuchs, Anfinsen)(159) 417

Nuclease
Lability of in vitro amino acid-incorporating systems of sea urchin eggs in relation to --- release and other factors (Castañeda, Tyler)(166) 741

Nuclease
Purification and properties of sugar-nonspecific --- in pupa of silkworm, Bombyx mori Linné (Himeno et al.)(167) 575

Nuclease
--- of yeast. I. Properties and variability of ribonucleases (Nakao et al.)(151) 114

Nuclease
--- of yeast. II. Purification, properties and specificity of an endonuclease from yeast (Lee, Nakao, Bock)(151) 126

Nuclei
Amino acid incorporation into proteins in isolated rat liver --- (Ono, Terayama) (166) 175

Nuclei
Degradation of histones during the manipulation of isolated --- and deoxyribonucleoprotein (Stellwagen, Reid, Cole) (155) 581

Nuclei
Fractionation of --- and the integrity of purified nucleoli in HeLa cells (Vesco, Penman)(169) 188

Nuclei
Increase during lactation of RNA synthesis by isolated liver --- (Leake, Mayne, Barry)(157) 198

Nuclei
Influence of ionic strength and a polyanion on transcription in vitro. I. Stimulation of the aggregate RNA polymerase from rat liver --- (Chambon et al.)(157) 504

Nuclei
Low molecular weight RNA of the chromatin fraction from Novikoff hepatoma and rat liver --- (Prestayko, Busch)(169) 327

Nuclei
Purification and properties of a neutral proteinase from calf thymus --- (Furlan, Jericijo, Suhar)(167) 154

Nuclei
Studies on the biosynthesis of very lysine-rich histones in isolated --- (Reid, Stellwagen, Cole)(155) 593

Nuclei
Studies of phosphorus metabolism by isolated ---. X. Nucleolar nucleoside diphosphatase activity (Penniall et al.)(157) 258

Nuclei
System in vitro for the RNA and protein synthesis by isolated salivary glands and by --- from Chironomus larvae (Ristow, Arends)(157) 178

Nucleic acids
Halogenation of ---. VI. Iodination of nucleosides in dimethylformamide (Yoshida, Duval, Ebel)(161) 13

Nucleic acid
High contrast staining of individual --- molecules (Gordon, Kleinschmidt)(155) 305

Nucleic acids
Reactions of glyoxal with ---, nucleotides and their component bases (Nakaya et al.) (161) 23

Nucleic acids
Role of --- in the sodium-retaining action of aldosterone (De Weer, Crabbé)(155) 280

Nucleic acid derivatives
Thin-layer electrophoresis of --- on microcrystalline cellulose (Augusti-Tocco et al.) (155) 8

Nucleic acid precursors
Studies on the uptake of --- into cells in tissue culture (Scholtissek)(158) 435

Nucleic acid stabilization
--- by proteins toward enzymic digestion (Padayatty, Hensley, Van Kley)(161) 51

Nucleic acid synthesis
Concerning the site of action of deoxyadenosine (deoxyadenosine triphosphate) upon --- in the cancer cell (Vornovitskaja, Shapot, Nicolskaja)(166) 596

Nucleic acid synthesis
  Influence of gibberellic acid on --- in dwarf pea internodes (Broughton) (155) 308
Nucleohistone
  Proteolytic contamination of calf thymus --- and its inhibition (Panyim, Jensen, Chalkley) (160) 252
Nucleohistone
  Selective dissociation of pea bud --- (Fambrough, Bonner) (154) 601
Nucleohistone
  Viscosity of --- in urea (Bartley, Chalkley) (160) 224
Nucleolar RNA
  Studies on the sedimentation properties of nuclear RNA, --- and extranucleolar nuclear RNA (Fujisawa, Muramatsu) (169) 175
Nucleolar RNA metabolism
  Selective suppression of --- in the absence of protein synthesis (Higashi et al.) (166) 388
Nucleoli
  Fractionation of nuclei and the integrity of purified --- in HeLa cells (Vesco, Penman) (169) 188
Nucleoli
  Presence of two RNA polymerase activities in liver --- (Jacob, Sajdel, Munro) (157) 421
Nucleoli
  RNA synthesis in the --- of mouse ascites tumour cells in relation to nucleolar components (Izawa, Kawashima) (155) 51
Nucleosides
  Halogenation of nucleic acids. VI. Iodination of --- in dimethylformamide (Yoshida, Duval, Ebel) (161) 13
Nucleosides
  Optical rotatory dispersion of the anomeric --- and nucleotides (Nishimura, Shimizu, Iwai) (157) 221
Nucleoside analogs
  Inhibition of the synthesis of 5-phosphoribosyl-1-pyrophosphate by 3'-deoxyadenosine and structurally related --- (Tyrsted, Sartorelli) (155) 619
Nucleoside diphosphatase
  Non-specific nature of the --- of rat liver microsomes (Penniall, Holbrook) (151) 700
Nucleoside diphosphatase
  Studies of phosphorus metabolism by isolated nuclei. X. Nucleolar --- activity (Penniall et al.) (157) 258
Nucleoside diphosphokinase
  --- of Escherichia coli infected and uninfected with the RNA-bacteriophage f_2 (Argyrakis-Vomvoyannis) (166) 593
Nucleoside polyphosphatase
  Studies on acid hydrolases. V. Isolation and characterization of spleen --- (Bernardi, Bernardi) (155) 371
Nucleoside separation
  --- on polyacrylamide gel columns (Carrara, Bernardi) (155) 1
Nucleoside transport
  --- of two non-metabolized nucleosides, deoxycytidine and cytosine arabinoside, in a sub-line of the L1210 murine leukemia (Kessel, Shurin) (163) 179
Nucleoside triphosphatases
  Purification of --- from pea seedling ribosomes (Matsushita, Raacke) (166) 707
5'-Nucleotidase
  --- activities in the soluble fraction of rat liver (Fritzson) (151) 716
5'-Nucleotidase
  Partial solubilization of protein and --- from microsomal membranes of the rat liver by ultrasonic irradiation (Song et al.) (150) 300
Nucleotides
  Optical rotatory dispersion of the anomeric nucleosides and --- (Nishimura, Shimizu, Iwai) (157) 221
Nucleotide
  Study of the use of alkaline degradation of DNA derivatives as a procedure for the determination of --- distribution (Brammer et al.) (166) 732
Nucleotide clusters
  --- in DNA. III. Separation of pyrimidine isostichs according to base composition (Černý, Mushynski, Spencer) (169) 439
Nucleotide content
  ---, calcium accumulation, and phosphate metabolism in subcellular fractions of rat brain (Abood et al.) (153) 531
Nucleotide level
  Study of adenosine 5'-mono-, di- and triphosphates in plant tissues. IV. Regulation of ---, in vivo, by adenylate kinase: Theoretical and experimental study (Bomsel, Pradet) (162) 230
Nucleotide metabolism
  --- in tissue culture cells at low temperatures. III. Studies in vitro (Scholtissek) (155) 14
5'-Nucleotide monosaccharides
  Metabolism of --- in inflammatory connective tissue (Bole, Leutz) (156) 217
Nucleotide sequences
  --- at the 5'-linked ends of viral RNA's (Glitz, Bradley, Fraenkel-Conrat) (161) 1

O

Ochromonas danica
Chlorophyll absorption and fluorescence in --- (Brown)(153) 901

$\Delta^{9,12}$-Octadecadienoic acid
Oxidation of the geometric isomers of --- by rat liver mitochondria (Anderson) (152) 531

Oleate
Effects of --- concentration on its metabolism by the perfused rat liver (Richards, Ruderman, Herrera)(152) 632

Oleic acid
Inhibition of prostaglandin synthesis by---, linoleic acid and linolenic acid (Pace-Asciak, Wolfe)(152) 784

[^{3}H]Oleic acid metabolism
--- in the partially hepatectomized rat (Fex, Olivecrona)(152) 237

Oligodeoxyadenylic acid
Chemical analysis of DNA alterations. I. Base liberation and backbone breakage of DNA and --- induced by hydrogen perioxide and hydroxylamine (Rhaese, Freese) (155) 476

Oligomycin
--- -like inhibition of yeast respiration by N,N'-dicylclohexylcarbodiimide and the nature of energy coupling in intact yeast cells (Kováč, Galeotti, Hess)(153) 715

Oligonucleotides
Nuclear magnetic resonance study of thermal effects upon base stacking in ---: ApA > p(Hruska, Danyluk)(157) 238

Oligonucleotides
Sequence determination of --- obtained from pancreatic ribonuclease digests of M12 and R17 RNA's (Thirion, Kaesberg) (161) 247

Oligosaccharides
Enzymatic degradation of heparitin sulphate. II. Isolation and characterization of non-sulphated --- (Linker, Hovingh) (165) 89

Oligosaccharides
Glucuronic acid- and glucosamine-containing --- from the heparin-protein linkage region (Lindahl)(156) 203

Oligosaccharide
Isolation and characterization of a urinary --- characteristic of blood group O(H)-secretors (Lundblad)(165) 202

Oligotyrosyl compounds
Energy transfer in ---: Fluorescence quenching as a function of the phenolic hydroxyl groups (Knopp, Longworth)(154) 436

Olivomycin
Effect of --- and echinomycin on initiation and growth of RNA chains catalyzed by RNA polymerase (Gause, Loshkareva, Zbarsky)(166) 752

Oncogenic virus
RNA with amino acid-acceptor activity isolated from an --- (Trávníček)(166) 757

Ontogeny
--- of pig and duck esterases (Holmes, Masters)(159) 81

Optical rotatory dispersion
--- of the anomeric nucleosides and nucleotides (Nishimura, Shimizu, Iwai)(157) 221

Optical rotatory dispersion
Comparative study of ultraviolet --- of DNA's from various sources at neutral and acidic pH (Luck, Zimmer)(169) 466

Ornithine aminotransferase
Regulatory effect of glucocorticoids on --- and serine dehydratase in rat liver (Peraino)(165) 108

Ornithine-containing lipid
Studies on the structure of an --- from non-sulphur Rhodopseudomonas spheroides (Gorchein)(152) 358

Ornithine transaminase
Derepression of arginase and of --- in nitrogen-starved baker's yeast (Middelhoven)(156) 440

Ornithine transcarbamylase
Regulation and kinetics of the two --- enzymes of Bacillus licheniformis (Laishley, Bernlohr)(167) 547

Orosomucoid
Behaviour of human --- in acid media (Karpenko, Pavičeк, Kalous)(154) 245

Orotic acid
Control of purine biosynthesis de novo by --- in vivo and in vitro (Rajalakshmi, Handschumacher)(155) 317

Orotic acid
Distribution of radioactivity between the acid-soluble pool and the pools of RNA in the nuclear, non-sedimentable and ribosome fractions of rat liver after a single injection of labelled --- (Blobel, Potter)(166) 48

Orotic acid
Effects of --- on dihydrofolate dehydrogenase and on tetrahydrofolate-dependent enzymes in the chick liver (Pasquali et al.) (158) 482

Orotic acid
Molecular mechanisms of liver regeneration. VI. Incorporation of [^{14}C]--- into cytoplasmic RNA in normal and regenerating liver (Fausto, Van Lancker)(161) 32

Orotic acid
Studies on the effect of --- on nucleic acid metabolism in vitamin B_{12}-deficient chick liver (Caldarera et al.)(161) 156

Osmium tetroxide
--- fixation of lipids for electron microscopy: A possible reaction mechanism (Riemersma)(152) 718

Ouabain
Rates of action of potassium ion and --- on the sodium pump in squid axons (Baker, Manil)(150) 328

Ouabain
Studies on (Na$^+$-K$^+$)-activated ATPase. XXI. Changes in (Na$^+$-K$^+$)-activated ATPase activity and --- -sensitive ^{86}Rb$^+$ uptake rate in regenerating rat liver (Bakkeren, Bonting) (150) 467

Ouabain
Water and electrolyte contents of rat renal cortical slices incubated in potassium-free media and media containing --- (MacKnight)(150) 263

Ouabain-sensitive ATPase

Activation by leucine of --- of HeLa cells (Mohri et al.)(150) 537

Ovalbumin
Kinetics of the reaction of N-ethylmaleimide with denatured β-lactoglobulin and --- (Franklin, Leslie)(160) 333

Ovalbumin
Use of the pH-stat for measuring the denaturation of --- in acid solutions (Ottesen, Wallevik)(160) 262

Ovomucoid
Reduction and reoxidation of turkey --- –a protein with dual and independent inhibitory activity against trypsin and α-chymotrypsin (Sjöberg, Feeney)(168) 79

Oxalate decarboxylase
Enzymatic oxalate decarboxylation in Aspergillus niger. II. Hydrogen peroxide formation and other characteristics of the --- (Emiliani, Riera)(167) 414

Oxidase activity
Role of iron in the --- of ceruloplasmin (McDermott et al.)(151) 541

α-Oxidation
--- of 2-hydroxystearic acid in vitro (Lippel, Mead)(152) 669

α-Oxidation
--- of a β-methyl-substituted fatty acid in guinea-pig liver mitochondria (Stokke) (152) 213

Oxidation-reduction potential
Nature of haem moiety and --- of cytochrome 558 in Euglena chloroplasts (Ikegami, Katoh, Takamiya)(162) 604

Oxidation-reduction potentials
--- and stoichiometry of electron transfer in ferredoxins (Tagawa, Arnon)(153) 602

Oxidation-reduction reactions
Energy-transfer and electron-transfer systems in algal photosynthesis. II. --- of two cytochromes and interactions of two photochemical systems in red algae (Nishimura)(153) 838

Oxidative phosphorylation
--- in brown adipose tissue mitochondria (Guillory, Racker)(153) 490

Oxidative phosphorylation
--- in Corynebacterium diphtheriae (Kufe, Howland)(153) 291

Oxidative phosphorylation
Coupling factors of --- (Vallejos, Van den Bergh, Slater)(153) 509

Oxidative phosphorylation
Mechanism of --- in the chemoautotroph Nitrobacter agilis (Aleem)(162) 338

Oxidative phosphorylation
Mitochondria with loosely and tightly coupled --- in skeletal muscle (Hulsmann, De Jong, Van Tol)(162) 292

Oxidative phosphorylation
Role of the ADP-ATP exchange enzyme in --- (Groot, Van den Bergh)(153) 22

Oxidative phosphorylation
--- in yeast. I. Isolation and properties of phosphorylating mitochondria from stationary phase cells (Kováč, Bednárová, Greksák)(153) 32

Oxidative phosphorylation
--- in yeast. II. An oxidative phosphorylation-deficient mutant (Kováč, Hrušovská) (153) 43

Oxidative phosphorylation
--- in yeast. III. ATPase activity of the mitochondrial fraction from a cytoplasmic respiratory-deficient mutant (Kováč, Weissová)(153) 55

Oxidative phosphorylation
--- in yeast. IV. Combination of a nuclear mutation affecting oxidative phosphorylation with cytoplasmic mutation to respiratory deficiency (Kováčová, Irmlerová, Kováč)(162) 157

α-Oxobutyrate oxidation
--- by isolated mammalian mitochondria (Ciman, Siliprandi)(162) 164

2-Oxoglutarate
Effect of --- on the catalytic activity and stability of glutamate dehydrogenase (Eisenkraft, Veeger)(167) 227

α-Oxoglutarate
Evidence of a permeability barrier for --- in rat liver mitochondria (De Haan, Tager) (153) 98

16-Oxo-testosterone
Isolation of --- from human placentas perfused in situ (Reynolds, Mancuso, Diczfalusy)(152) 438

Oxygen
Incorporation of molecular --- into testosterone acetate directly derived from progesterone by Cladosporium resinae (Nakano, Sato, Tamaoki)(164) 585

Oxygen
Study of the thermal step of the photosynthetic evolution of --- by a cooling method (Etienne)(153) 895

Oxygen evolution
Inhibition, by sulphate, of the --- associated with photosynthetic carbon assimilation (Baldry, Cockburn, Walker)(153) 476

Oxygen evolution
Parallel time courses of --- and chlorophyll fluorescence (Bannister, Rice)(162) 555

Oxygen-induced synthesis
Mechanism of the inhibitory effect of zinc on the --- of the yeast respiratory system (Ohaniance, Chaix)(170) 435

Oxygen luminometer
---. An apparatus to determine small amounts of oxygen, and application to photosynthesis (Burr, Mauzerall)(153) 614

Oxygen production
Polarographic method for detection of --- and reduction of Hill reagent by isolated chloroplasts (Joliot, Joliot)(153) 625

Oxygen uptake
Light induced --- by epoxy xanthophylls in New Zealand spinach leaves (Tetragonia expansa)(Takeguchi, Yamamoto)(153) 459

Oxyperoxidase
Participation of horseradish --- (compound III) in interenzymic reaction steps (Björkstén)(151) 309

Oxytetracycline
Biosynthesis of phenols. XV. Isolation of some shikimic acid-derived metabolites from mutant strains of Streptomyces rimosus unable to produce --- (Catlin, Hassall, Pratt) (156) 109

Oxythiamine
Effect of antivitamins on the microbiological biosynthesis of vitamins. III. Relation between amounts of thiamine, thiamine monophosphate and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with --- in the culture medium (Šicho, Králová)(165) 459

Oxytocic activity
Effects of peptides with --- on the metabolism of glucose by adipose tissue (Migliori-

ni, Linder, Camargo)(158) 160
Oxytocic substance
  Isolation of a new --- from ox hypothalamus(North, Hawker, Zerner)(160) 286
Oxytocin
  Action of noradrenalin and --- on the active sodium transport and the permeability of frog skin to water. Role of adenosine 3',5'-monophosphate(Bastide, Jard)(150) 113
Oxytocin
  Analysis of the dose-response relationships for the action of --- and noradrenalin on frog skin and frog bladder (Jard, Bastide, Morel)(150) 124
Oxytocin
  Kinetic analysis of the effect of --- on the water permeability of frog bladder. Role of adenosine 3',5'-monophosphate (Bourguet) (150) 104

P

Palmitate
Carnitine and carnitine palmityltransferase in Euglena growing with --- as a sole carbon source (Wittels, Blum)(152) 220
[1-^{14}C]Palmitate
Incorporation of --- into the lipids of bovine blood cells (Winterbourn, Batt)(152) 255
Palmitate oxidation
Inhibition of --- by 2-deoxy-D-glucose in ascites tumour cells (Sauermann)(170) 88
Palmitic acid
Effect of sodium transport and vasopressin on the oxidation of --- by the toad bladder (Ferguson, Handler, Orloff)(163) 150
Palmityl coenzyme A micelles
Physical properties of --- (Zahler, Barden, Cleland)(164) 1
Pancreatic enzymes
Identification of --- in human duodenal contents (Silberberg, Hadorn)(167) 616
Pancreatic ribonuclease
Sequence determination of oligonucleotides obtained from --- digests of M12 and R17 RNA's (Thirion, Kaesberg)(161) 247
Pancreatic ribonuclease
Specificity of --- towards 2',3'-cyclic phosphates derived from α-lyxofuranosyl derivatives of thymine (Holý, Šorm)(161) 264
Pandalus borealis
Chromactivating hormones of ---. Isolation and purification of the 'red-pigment-concentrating hormone' (Fernlund, Josefsson) (158) 262
Pantetheine
Formation of S-acyl --- from acyl-CoA by plasma membranes (Stahl, Trams)(163) 472
Papain
Rate-limiting reaction in --- action as derived from the reaction of the enzyme with chloroacetic acid (Sluyterman)(151) 178
Paraquat
--- in chloroplasts (Baldwin, Clarke, Wilson) (162) 614
Parathyroid
Entry of sugars into bone cells. Independence from --- extract and thyrocalcitonin effects (Dos Reis, Rosenbusch, Nichols Jr.) (150) 311
Parathyroid hormone
Effect of --- on adenyl cyclase in rat kidney (Douša, Rychlík)(158) 484
Parathyroid hormone
Effect of --- in vivo on the labelling of nuclear RNA from the intestinal mucosa and liver of vitamin D-deficient and normal chicks (Hamilton, Detert, Cohn)(155) 311
Parathyroid hormone
Specificity of the action of --- upon mitochondrial metabolism: Cyanogen bromide-derived parathyroid-hormone peptides (Goodman, Rasmussen)(153) 749
β Particles
Fluorescence excitation of chlorophyll in green plants by --- (Pearlstein)(153) 504
Passive transport
Active transport and --- of galactose in yeast (Van Steveninck, Dawson)(150) 47
Pasteurella multocida
Cysteine biosynthesis in ---. Cysteine synthase, purification and properties (De Issaly)(151) 473
Pea root nucleic acids
Presence of AMP-rich RNA in counter-current distribution and column chromatography fractions of --- (Ewing, Cherry) (161) 331
Pea seedling ribosomes
Purification of nucleoside triphosphatases from --- (Matsushita, Raacke)(166) 707
Penicillins
Interaction of penicillinase with ---. VI. Comparison of free and antibody-bound enzyme (Zyk, Citri)(159) 317
Penicillins
Interaction of penicillinase with ---. VII. Effect of specific antibodies on conformative response (Zyk, Citri)(159) 327
Penicillinase
Anomalous dissociation constants for --- and competing substrates (Zyk, Citri) (151) 306
Penicillinase
Interaction of --- with penicillins. VI. Comparison of free and antibody-bound enzyme (Zyk, Citri)(159) 317
Penicillinase
Interaction of --- with penicillins. VII. Effect of specific antibodies on conformative response (Zyk, Citri)(159) 327
Penicillium notatum
Non-discriminating proteinase of ---. Partial purification and specificity (Marshall, Manion, Porath)(151) 414
Penicillium notatum
Studies on the lecithinase from --- (Saito, Sato)(151) 706
Penicilloylation
Studies on the direct neutral --- of functional groups occurring on proteins (Schneider, De Weck)(168) 27
n-Pentanol
Solubilization of human erythrocyte membranes by --- (Zwaal, Van Deenen)(150) 323
Pentose cycle
Oxidation of [6-^{14}C]glucose to $^{14}CO_2$ by the --- in Ehrlich ascites tumour cells (Sato, Suzuki, Tsuiki)(165) 189
Pentose phosphate pathway
Enzymes and intermediates of the --- in liver and hepatomas (Gumaa, Greenslade, McLean)(158) 300
Pepsin
Coloured inhibitors of --- (Stepanov, Lobareva, Mal'tsev)(151) 719
Peptidases
Protein breakdown: Peptide cleavage of the X-Pro-Y type by kidney --- (Nordwig, Dehm)(160) 293
Peptides
Effects of --- with oxytocic activity on the metabolism of glucose by adipose tissue (Migliorini, Linder, Camargo)(158) 160
Peptides
Electron spin resonance of iron-nitric oxide complexes with amino acids, --- and proteins (Woolum, Tiezzi, Commoner)

(160) 311
Peptides
  Stereochemical studies on cyclic ---. II. Molecular structure of cyclotriprolyl (Venkatachalam)(168) 397
Peptides
  Stereochemical studies on cyclic ---. III. Conformational analysis of cyclotetrapeptides (Ramakrishnan, Sarathy)(168) 402
Peptide cleavage
  Protein breakdown: --- of the X-Pro-Y type by kidney peptidases (Nordwig, Dehm) (160) 293
Peptide conjugate
  --- with the sequence Phe-Pro-Val-Orn and its relationship to the biosynthesis of gramicidin S (Holm, Frøholm, Laland) (158) 459
Peptidoglycolipid
  Significance of the size of the polysaccharide portion for adjuvanticity of a --- (wax D) of Mycobacteria (Koga et al.)(158) 144
Peptidyl transfer RNA
  Stability of ---. The intermediate of protein synthesis (Bresler et al.)(155) 465
Perfused rat heart
  Effects of electron microscopic fixatives on cell membranes of the --- (Krames, Page) (150) 24
Periodate-Schiff reagents
  Detection of lipids on thin-layer chromatograms with the --- (Shaw)(164) 435
Permeability
  Action of noradrenalin and oxytocin on the active sodium transport and the --- of frog skin to water. Role of adenosine 3',5'-monophosphate (Bastide, Jard)(150) 113
Permeability
  Demonstration of phospholipid splitting as the factor responsible for increased --- and block of axonal conduction induced by snake venom. II. Study on squid axons (Condrea, Rosenberg)(150) 271
Permeability
  Effects of pH and polyvalent cations on the selective --- of gall-bladder epithelium to monovalent ions (Wright, Diamond) (163) 57
Permeability
  Effects of temperature and cholesterol on the glucose --- of liposomes prepared with natural and synthetic lecithins (Demel et al.)(150) 655
Permeability
  --- of isolated bovine retinal outer segment fragments (Brierley et al.)(163) 117
Permeability
  Lipid composition and --- of liposomes (De Gier, Mandersloot, Van Deenen)(150) 666
Permeability
  Observations on the --- of thymocytes to non-electrolytes (Kodama, Tedeschi) (163) 277
Permeability
  --- of Valonia to water and solutes: Apparent absence of aqueous membrane pores (Gutknecht)(163) 20
Permeation kinetics
  Sulphate transport system of Chlorella pyrenoidosa and its regulation. I. --- (Vallée, Jeanjean)(150) 599
Peroxidase
  Circular dichroism of horseradish --- and its enzyme-substrate compounds (Strickland)(151) 70
Peroxidases
  Isolation, purification and physicochemical properties of turnip --- (Mazza et al.) (167) 89
Peroxidase
  Thermal equilibrium between high- and low-spin states in ferric cytochrome c --- and some discussion on the enzyme-substrate complex (Iizuka, Kotani, Yonetani) (167) 257
Peroxide
  --- induced binding of hydrocarbons to DNA (Morreal et al.)(169) 224
Peroxisomes
  Separation of mitochondria, --- and lysosomes by zonal centrifugation in a Ficoll gradient (Brown)(162) 152
Petromyzon marinus
  Proton magnetic relaxation in solution of lamprey (---) haemoglobins (Maričič, Rumen)(154) 496
Phage
  Biophysical properties of a vibrio --- and its DNA (Mitra, Basu)(155) 143
Phage
  Effect of RNA on the infectivity of --- DNA (Bailey, Fry)(166) 726
Phage
  Release of DNA from --- on the top of sucrose gradients (Yamagishi)(166) 738
Phage
  Role of a competence in the infection of Escherichia coli spheroplasts by isolated --- DNA (Iliashenko, Dityatkin, Danileichen)(161) 259
Phage DD7
  Presence of minor bases in DNA of --- and phage S_d and their hosts (Nikolskaya et al.) (155) 626
Phage λ
  Sedimentation of DNA from bacterio --- -infected Escherichia coli (Carter, Smith) (166) 735
Phage M12
  Sequence determination of oligonucleotides obtained from pancreatic ribonuclease digests of --- and R17 RNA's (Thirion, Kaesberg)(161) 247
Phage MS2
  5'-Terminal end group of the RNA of the --- (157) 195
Phage MS2
  Virus-specific proteins in Escherichia coli infected with some amber mutants of --- (Viñuela et al.)(155) 558
Phage P1
  Partial reactivation of irradiated --- by strain B_{S2} of Escherichia coli (Donch, Greenberg)(166) 271
Phage R17
  Sequence determination of oligonucleotides obtained from pancreatic ribonuclease digests of phage M12 and --- RNA's (Thirion, Kaesberg)(161) 247
Phage S_d
  Presence of minor bases in DNA of phage DD7 and --- and their hosts (Nikolskaya et al.)(155) 626
Phage SPO-1
  X-ray diffraction study of --- DNA (Higuchi, Iitaka, Tsuboi)(166) 717
Phages T2
  Base complementarity between rapidly labelled RNA in Escherichia coli B infected with ultraviolet-irradiated --- and T2-DNA

(Yamada, Nozu)(169) 67

Phage T2
Increase of uridine kinase activity in Escherichia coli B following --- infection or chloramphenicol treatment (Pravdina, Galegov)(166) 279

Phage T4
Effect of --- infection on messenger RNA synthesis in Escherichia coli (Rouviere et al.)(166) 94

Phage T4
Genetic transformation of the bacterio ---. I. An outline and some properties of the phage transformation system (Veldhuisen, Poelman, Cohen)(161) 94

Phage T4
Genetic transformation of the bacterio ---. II. Biological activity of DNA fragments (Veldhuisen, Poelman, Cohen)(161) 109

Phage T4
Genetic transformation of the bacterio ---. III. Influence of ultraviolet irradiation and nitrous acid on the biological activity of isolated T4 DNA (Veldhuisen, Poelman, Cohen)(161) 115

Phage T4
Metabolism of deoxythymidine 3'-mono- and diphosphate in normal and bacterio--- infected Escherichia coli (Harris, Panter, Symons)(161) 291

Phage T4
Polyriboadenylate polymerase and its inhibition in --- -infected Escherichia coli and Shigella dysenteriae (Colvill, Terzi)(155) 394

Phage T4 proteins
Studies on the requirement for formyl residues in the synthesis of bacterio --- (Klein et al.)(169) 543

Phage ΦX174
--- DNA polymerase (Grunau, Daniel)(166) 728

Phage ΦX174
Increased DNA polymerase activity in Escherichia coli C after infection with --- (Huh, Helleiner)(155) 107

Phage ΦX-RF component I
Preparation and purification of --- (Komano, Sinsheimer)(155) 295

Phagocyte
Role of the --- in host-parasite interactions. XIII. The direct quantitative estimation of hydrogen peroxide in phagocytes (Paul, Sbarra)(156) 168

Phaseolus vulgaris
Isolation and composition of glycopeptide from a phytohaemagglutinin of --- (Takahashi, Liener)(154) 560

o-Phenanthroline
Catalytic oxidation of sulphhydryl groups by --- copper complex (Kobashi)(158) 239

Phenethyl alcohol
---: Reversible inhibition of synthesis of macromolecules and disaggregation of polysomes in rat hepatoma cells (Plagemann)(155) 202

Phenols
Biosynthesis of ---. XV. Isolation of some shikimic acid-derived metabolites from mutant strains of Streptomyces rimosus unable to produce oxytetracycline (Catlyn, Hassall, Pratt)(156) 109

Phenolic acids
--- and iron transport in Bacillus subtilis (Peters, Warren)(165) 225

Phenol-O-methyltransferase
--- (Axelrod, Daly)(159) 472

Phenol sulphotransferase
Kinetic studies of the --- reaction (Banerjee, Roy)(151) 573

Phenothiazine
Inhibition of cyclic 3',5'-nucleotide phosphodiesterase by --- and reserpine derivatives (Honda, Imamura)(161) 267

Phenylacetate
Enzymatic conversion of phenylpyruvate to --- (Asakawa, Wada, Yamano)(170) 375

Phenylalanine
Biosynthesis of --- and tyrosine in the pea (Pisum sativum): Chorismate mutase (Cotton, Gibson)(156) 187

Phenylalanine
Conversion of --- to tyrosine in the bovine mammary secretory cell (Jorgenson, Larson)(165) 121

L-Phenylalanine
Production of m-tyramine from --- by rat liver preparations (Coulson, Henson, Jepson)(156) 135

Phenylalanine hydroxylase
--- activity towards two substrates simultaneously: Enhancement or inhibiton by phenylalanine, tryptophan and their derivatives (Coulson, Wardle, Jepson)(167) 99

Phenylalanine incorporation
Study of --- into proteins in a cell-free system from chicken liver as a function of age (Beck et al.)(169) 248

L-Phenylalanine-2-oxoglutarate aminotransferase
Brain aromatic aminotransferase. I. Purification and some properties of pig brain --- (George, Gabay)(167) 555

Phenylalanine peptides
Adsorption chromatography of --- on Sephadex (Bretthauer, Golichowski)(155) 549

Phenylalanine transfer RNA
Fluorescence assay for --- (Yoshikami et al.)(166) 714

Phenylalanine transfer RNA
Isolation and properties of undermethylated --- from a relaxed mutant of Escherichia coli (Shugart, Novelli, Stulberg)(157) 83

Phenyldiazene
Complexes of --- (phenyldiimide) with deoxyhaemoglobin and ferrohaem (Huang, Kosower)(165) 483

Phenyldiimide
Complexes of phenyldiazene (---) with deoxyhaemoglobin and ferrohaem (Huang, Kosower)(165) 483

Phenylpolyphosphate
Synthesis of α- and β-9-D-arabinofuranosyladenine by --- (Lünzmann, Schramm)(169) 263

Phenylpyruvate
Enzymatic conversion of --- to phenylacetate (Asakawa, Wada, Yamano)(170) 375

Phlorrhizin-treated rats
Serine dehydratase activity in livers of --- and the hepatic serine plus threonine concentration (Bojanowska, Williamson)(159) 560

Phosphatase
Activation and stability of acid --- from lysosomes (Verity, Brown)(151) 284

Phosphatase
Chromatographic separation, the activation and inactivation of alkaline --- from

  chicken intestine (Schüssler) (151) 383
Phosphatase
  Effects of ATP and Na^+ on a K^+-activated --- from erythrocyte cell membranes (Rega, Garrahan, Pouchan) (150) 742
Phosphatase
  Estimate of the catalytic-centre activity and purity of human alkaline --- preparations (Moss, Eaton, Scutt) (154) 609
Phosphatase
  Heterogeneity of prostatic acid --- (Smith, Whitby) (151) 607
Phosphatase
  Human placental alkaline ---: Molecular weight and subunit structure (Gottlieb, Sussman) (160) 167
Phosphatase
  Immunochemical characterization of alkaline --- isozymes of the young mouse duodenum (Etzler) (154) 150
Phosphatase
  Inorganic pyrophosphatase activity of human placental alkaline --- (Sussman, Laga) (151) 281
Phosphatase
  Irreversible inactivation of (Na^+-K^+)-dependent ATPase and K^+-dependent --- by fluoride (Yoshida et al.) (150) 162
Phosphatase
  Presence of K^+-dependent --- in intestinal epithelial cell brush borders isolated by a new method (Boyd, Parsons, Thomas) (150) 723
Phosphatase
  Resistance of alkaline --- of human serum to the protease of Streptomyces griseus (Goldsmith, Robinson) (159) 405
Phosphatase
  Separation and study of the antigenic properties of peptides obtained by degradation of gliadin by different preparations of alkaline --- (Escribano, Daquo) (160) 69
Phosphatase synthesis
  Repressed and derepressed --- during synchronous growth of Chlorella pyrenoidosa (Knutsen) (161) 205
Phosphate esters
  Enthalpy change in the hydrolysis of the --- of myo-inositol (Raison, Evans) (170) 448
Phosphate compounds
  Role of --- in thaw contraction and the mechanism of thaw rigor (Kushmerick, Davies) (153) 279
Phosphate metabolism
  Nucleotide content, calcium accumulation, and --- in subcellular fractions of rat brain (Abood et al.) (153) 531
Phosphate transport
  Role of cellular P_i in --- and metabolism in human erythrocytes (Glader, Omachi) (150) 524
Phosphate uptake
  Isolation of a mutant of Bacillus cereus deficient in --- (Rosenberg, La Nauze) (156) 381
Phosphatidate
  Incorporation of long-chain and polyunsaturated acids into --- phosphatidylcholine (Hill, Lands) (152) 645
Phosphatidate phosphatase
  Effects in vitro and in vivo of synthetic --- inhibitors (Rosenthal, Ching-Hsien Han) (152) 96
Phosphatidate phosphohydrolase
  --- activity in liver cell surface membranes (Coleman) (163) 111
Phosphatides
  Compositions of --- from Bacillus natto at various growth phases (Urakami, Umetani) (164) 64
Phosphatides
  Incorporation of L-[Me-^{14}C] methionine and [Me-^{3}H]choline into lung --- (Spitzer, Morrison, Norman) (152) 552
Phosphatide acyl-hydrolase
  Phospholipases in arterial tissue. II. --- and lysophosphatic acyl-hydrolase activity in human and rat arteries (Eisenberg, Stein, Stein) (164) 205
Phosphatide pattern
  Changes in the --- of yeast cells in relation to active carbohydrate transport (Deierkauf, Booij) (150) 214
Phosphatidylcholines
  Acylation of isomeric monoacyl --- (Van den Bosch et al.) (152) 694
Phosphatidylcholine
  Incorporation of long-chain and polyunsaturated acids into phosphatidate and --- (Hill, Lands) (152) 645
Phosphatidyl[1,2-$^{14}C_2$]ethanolamines
  Fractionation of unaltered --- according to the degree of unsaturation of their predominant fatty acids (Hopkins, Sheehan, Lyman) (164) 272
Phosphatidylethanolamines
  Monolayer characteristics of saturated 1,2-diacyl phosphatidylcholines (lecithins) and --- at the air-water interface (Phillips, Chapman) (163) 301
Phosphatidylethanolamine monolayers
  Biochemical aspects of the visual process. II. Schiff base formation in --- upon penetration by retinaldehyde (De Pont, Daemen, Bonting) (163) 204
Phosphatidyl glycerol
  Enzymatic synthesis of --- in sheep brain (Stanacev, Isaac, Brookes) (152) 806
Phosphatidyl glycerol
  Incorporation of labelled glycerophosphoric acid into the lipids of rat brain preparations. III. On the --- biosynthesis (Possmayer, Balakrishnan, Strickland) (164) 79
Phosphatidyl glycerol
  Synthesis of the phytanyl diether analogs of phosphatidyl glycerophosphate and --- present in Halobacterium cutirubrum (Joo, Kates) (152) 800
Phosphatidyl glycerol biosynthesis
  Incorporation of labelled glycerophosphoric acid into the lipids of rat brain preparations. III. On the --- (Possmayer, Balakrishnan, Strickland) (164) 79
Phosphatidyl glycerophosphate
  Synthesis of the phytanyl diether analogs of --- and phosphatidyl glycerol present in Halobacterium cutirubrum (Joo, Kates) (152) 800
Phosphodiesterase
  Intracellular localization of exonuclear and endonuclear "---" activity by histochemical methods (Wolf et al.) (159) 212
Phosphoenolpyruvate
  Isocitrate lyase: Determination of K_m values and inhibition by --- (Syrett, John) (151) 295
Phosphoenolpyruvate carboxykinase
  Essential thiol group of sheep kidney mitochondrial --- (Barns, Keech) (159) 514
Phosphoenolpyruvate metabolism

--- and pyruvate metabolism in the adult liver fluke, Fasciola hepatica (Prichard, Schofield)(170) 63
Phosphofructokinase
Multiple inhibitor site for ATP on muscle --- as influenced by a pH: A computer analysis of "non-linear" kinetic data (Ui) (159) 50
Phosphoglycerate phosphomutase
Homogeneous crystalline --- of high activity. A simpe method for lysis of yeast (De la Morena, Santos, Grisolia)(151) 526
Phosphoglycerate phosphomutase
Simple and rapid procedure for the preparation of phosphopyruvate hydratase free from --- and pyruvate kinase (Grisolia, Bogart, Torralba)(151) 298
Phosphoglyceromutases
Hg^{2+}-induced dissociation of exchange reactions from catalytic activity of 2,3-diphosphoglycerate-dependent --- (Grisolia, Torralba, Tecson)(151) 367
Phosphohydrolases
Studies on plasma membranes. V. On the lipid dependence of some --- of isolated rat-liver plasma membranes (Emmelot, Bos) (150) 341
Phospholipases
--- in arterial tissue. II. Phosphatide acylhydrolase and lysophosphatic acyl-hydrolase activity in human and rat arteries (Eisenberg, Stein, Stein)(164) 205
Phospholipase
Isolation of lysophospholipase, free of --- activity, from rat brain (Leibovitz, Gatt) (164) 439
Phospholipase
Positional specificity of rat post-heparin --- (Infante, Koumanov, Polonovski) (164) 436
Phospholipase A
Effects of --- and pre-phospholipase A on black phospholipid membranes (Lesslauer et al.)(150) 306
Phospholipase A
Enhancing action of synthetic and natural basic polypeptides on erythrocyte-ghost phospholipid hydrolysis by --- (Klibansky et al.)(150) 15
Phospholipase A
Purification and properties of an anionic zymogen of --- from porcine pancreas (De Haas et al.)(159) 118
Phospholipase A
Purification and properties of --- from porcine pancreas (De Haas et al.)(159) 103
Phospholipase A$_1$
Purification and properties of --- from rat and calf brain (Gatt)(159) 304
Phospholipase C
Characterization of --- from a marine planktonic alga (Monochrysis lutheri) (Bilinski, Antia, Lau)(159) 496
Phospholipase C
Effect of --- on surviving muscle preparations (Martonosi)(150) 309
Phospholipase C
Enzymatic hydrolysis of phosphosphingolipids by Clostridium perfringens --- (Saito, Mukoyama)(164) 596
Phospholipase C
Inhibition of --- by phosphonate analogs of glycerophosphatides (Rosenthal, Pousada) (164) 226
Phospholipase contaminants
Cytotoxic, haemolytic and --- of commercial neuraminidases (Kraemer)(167) 205
Phospholipids
Bile acids and lipid metabolism. III. Influence of bile acids on --- in liver and bile of the isolated perfused dog liver (Swell, Cooper Bell Jr., Entenman)(164) 278
Phospholipids
Biosynthesis of ether-containing --- in the slug, Arion ater. III. Origin of the vinylic ether bond of plasmalogens (Thompson Jr.) (152) 409
Phospholipids
Chemical synthesis of 1-0-(D)- and 3-0-(L)-glyceryl monoethers, glyceryl diethers and derivatives: Glycerides, monoester phospholipids and diether --- (Chacko, Hanahan)(164) 252
Phospholipid
Demonstration of --- splitting as the factor responsible for increased permeability and block of axonal conduction induced by snake venom. II. Study on squid axons (Condrea, Rosenberg)(150) 271
Phospholipids
Effect of arachidonic acid on the microsomal desaturation of linoleic acid into γ-linolenic acid and their simultaneous incorporation into the --- (Nervi, Brenner, Peluffo)(152) 539
Phospholipid
Enhancing action of synthetic and natural basic polypeptides on erythrocyte-ghost --- hydrolysis by phospholipase A (Klibansky et al.)(150) 15
Phospholipid
Ion transport and --- labelling in rat liver mitochondria (Fang, Rasmussen)(153) 88
Phospholipids
Physical studies of ---. VIII. Nuclear magnetic resonance studies of diacyl-L-phosphatidylcholines (lecithins) (Salsbury, Chapman)(163) 314
Phospholipids
Physical studies of ---. X. The effect of sonication on aqueous dispersions of egg yolk lecithin (Chapman et al.)(163) 255
Phospholipids
Specificty of fatty acid composition of mitochondrial membrane --- (Huet, Lévy, Pascaud(150) 521
Phospholipids
Surface properties of acidic ---: Interaction of monolayers and hydrated liquid crystals with uni- and bivalent metal ions (Papahadjopoulos)(163) 240
Phospholipids
Surface properties of pure --- in relation to those of lung extracts (Watkins)(152) 293
Phospholipids
--- in the tissue of the eye. I. Isolation, characterization and quantitative analysis by two-dimensional thin-layer chromatography of diacyl and vinyl ether phospholipids (Broekhuyse)(152) 307
Phospholipids
--- in the tissue of the eye. II. Composition and incorporation of $^{32}P_i$ of phospholipids of normal rat and calf lens (Broekhuyse, Veerkamp)(152) 316
Phospholipids
--- of various sheep organs, rat liver and of their subcellular fractions (Getz et al.) (152) 325
Phospholipid-cholesterol structures

Differential effects of etiocholanolone on --- containing either testosterone or estradiol (Sessa, Weissmann)(150) 173

Phospholipid composition
Effect of sphingomyelinase from Clostridium perfringens on the metabolic activity and --- of thyroid slices (Macchia, Pastan) (152) 704

Phospholipid formation
Stimulation of RNA formation and --- by long-acting thyroid stimulator and by thyroid-stimulating hormone (Ochi, DeGroot) (170) 198

Phospholipid membranes
Effects of phospholipase A and pre-phospholipase A on black --- (Lesslauer et al.) (150) 306

Phospholipid membranes
Selective transport of ions through bimolecular --- (Liberman, Topaly)(163) 125

Phospholipid precursors
--- of prostaglandins (Lands, Samuelsson) (164) 426

Phospholipid turnover
--- and ultrastructural changes in resting and secreting bullfrog gastric mucosa (Kasbekar, Forte, Forte)(163) 1

Phosphonic acids
Biosynthesis of --- in Tetrahymena (Warren)(156) 340

2-Phosphonoacetaldehyde
Identification of --- as an intermediate in the degradation of 2-aminoethylphosphonate by Bacillus cereus (La Nauze, Rosenberg)(165) 438

Phosphopyruvate hydratase
Simple and rapid procedure for the preparation of --- free from phosphoglycerate phosphomutase and pyruvate kinase (Grisolia, Bogart, Torralba)(151) 298

Phosphopyruvate synthesis
Studies on the functional relationship between the --- and the substrate level phosphorylation in guinea-pig liver mitochondria (Ishihara, Kikuchi)(153) 733

5-Phosphoribosyl-1-pyrophosphate
Inhibition of the synthesis of --- by 3'-deoxyadenosine and structurally related nucleoside analogs (Tyrsted, Sartorelli) (155) 619

Phosphorus
Studies of --- metabolism by isolated nuclei. X. Nucleolar nucleoside diphosphatase activity (Penniall et al.)(157) 258

Phosphorus compounds
--- in the human erythrocyte (Bartlett) (156) 221

Phosphorus metabolism
--- during calcium transport (Neville, Holdsworth)(163) 362

Phosphorylase
Glycose as a regulator of glycogen phosphorylase in rat diaphragm. I. Effect of glucose and related compounds on --- and glycogen levels (Holmes, Mansour)(156) 266

Phosphorylase
Hormonal control of thyroid --- (Butcher, Serif)(156) 59

Phosphorylase
Purification, properties and mechanism of interconversion of kidney --- (Villar-Palasi, Gazquez-Martinez)(159) 479

Phosphorylase
Regulation of glycogen metabolism in liver by the autonomic nervous system. III. Differential effects of sympathetic-nerve stimulation and of catecholamines on liver --- (Shimazu, Amakawa)(165) 349

Phosphorylase b
Effect of ^{60}Co γ-irradiation of --- (Muszbek, Damjanovich, Csaba)(167) 464

Phosphorylase phosphatase
Glucose as a regulator of glycogen phosphorylase in rat diaphragm. II. Effect of glucose and related compounds on --- (Holmes, Mansour)(156) 275

Phosphorylated intermediate
Comparison of sources of a --- in transport ATPase (Bader, Post, Bond)(150) 41

Phosphorylated protein
Identification of succinyl-CoA synthetase as the major --- formed from ATP in Escherichia coli extracts (Sedmak, Ramaley) (170) 440

Phosphorylation
Effect of deuterium oxide on respiratory-chain --- in sub-mitochondrial particles (Muraoka, Slater)(162) 170

Phosphorylation
Stoichiometric relation of --- to electron transport in isolated chloroplasts (Izawa, Good)(162) 380

Phosphorylation
Studies on the functional relationship between the phosphopyruvate synthesis and the substrate level --- in guinea-pig liver mitochondria (Ishihara, Kikuchi)(153) 733

Phosphoryl transfer
Enhancement of --- by adenosine 3',5'-monophosphate in the presence of a membranous fraction from canine kidney (Cunningham)(165) 574

Phosphosphingolipids
Enzymatic hydrolysis of --- by Clostridium perfringens phospholipase C (Saito, Mukoyama)(164) 596

Phosphotransferase
Liver microsomal inorganic pyrophosphate–glucose ---: Alterations in activity-pH profiles by cortisone in vivo (Nordlie et al.) (158) 157

Phosvitin synthesis
Site of --- in Xenopus laevis (Rudack, Wallace)(155) 299

Photochemical systems
Evidence for three --- in Chromatium D (Morita)(153) 241

Photochemistry
--- of polynucleotides. II. Mononucleotide and dinucleotide fluorescence at ordinary temparatures (Leng, Pochon, Michelson) (169) 338

Photochemistry
--- of polynucleotides. III. Study of the luminescence of polynucleotides at normal temperature (Pochon, Leng, Michelson) (169) 350

Photoinhibition
--- of respiratory adaptation of Saccharomyces cerevisiae (Guerin, Jaques)(153) 138

Photooxidation of methionine
Dye-sensitized selective --- (Jori et al.) (154) 1

Photooxidation
Effect of --- and histidine reagents on Murex trunculus haemocyanin (Wood, Bannister)(154) 10

Photophosphorylation
Chloroplast shrinkage and increased --- in vitro upon illuminating intact plants of Pi-

- sum sativum (Nobel) (153) 170
- Photophosphorylation
  - Chlorotri-n-butyltin. An inhibitor of --- in isolated chloroplasts (Kahn) (153) 203
- Photophosphorylation
  - Relationship of hydrogen ion transport to --- in spinach chloroplasts (Dilley, Shavit) (162) 86
- Photoreactivability
  - Trans-syn thymine dimers in ultraviolet-irradiated denatured DNA: Identification and --- (Ben-Hur, Ben-Ishai) (166) 9
- Photoreactivating enzyme
  - Minimum size of the substrate for yeast --- (Setlow, Bollum) (157) 233
- Photoreduction
  - Reversible --- of chlorophyll a to a compound, $Ch_aH_2$610, with an absorption maximum at 610 nm (Hendrich) (162) 265
- Photosynthesis
  - Comparison of the separate package and spill-over models of --- for the alga Chlorella pyrenoidosa (Williams) (153) 484
- Photosynthesis
  - Electron paramagnetic resonance studies on --- in bacteria. I. Properties of photo-induced EPR signals of Chromatium D (Schleyer) (153) 427
- Photosynthesis
  - Energy-transfer and electron-transfer systems in algal ---. II. Oxidation–reduction reactions of two cytochromes and interactions of two photochemical systems in red algae (Nishimura) (153) 838
- Photosynthesis
  - Inhibition of partial reactions in bacterial --- by 3-(3,4-dichlorophenyl)-1,1-dimethylurea (Yamashita, Kamen) (153) 848
- Photosynthesis
  - Interactions between --- and respiration in Chlorella. I. Types of transients of oxygen exchange after short light exposures (Ried) (153) 653
- Photosynthesis
  - --- by isolated chloroplasts. I. Diffusion of labelled photosynthetic intermediates between isolated chloroplasts and suspending medium (Bassham, Kirk, Jensen) (153) 211
- Photosynthesis
  - --- by isolated chloroplasts. II. Effects of addition of cofactors and intermediate compounds (Jensen, Bassham) (153) 219
- Photosynthesis
  - --- by isolated chloroplasts. III. Light activation of the carboxylation reaction (Jensen, Bassham) (153) 227
- Photosynthesis
  - Laser as a light source for the --- and growth of Chlorella vannielii (Karlander, Krauss) (153) 312
- Photosynthesis
  - Maximum quantum yield and action spectrum of --- and fluorescence in Chlorella (Govindjee, Rabinowitch, Govindjee) (162) 539
- Photosynthesis
  - Oxygen luminometer. An apparatus to determine small amounts of oxygen, and application to --- (Burr, Mauzerall) (153) 614
- Photosynthesis
  - Photoinhibition and excitation quenching in Photosystem II of ---, from fluorescence induction measurements (Malkin, Jones) (162) 297
- Photosynthesis
  - Quantum requirement of --- in Chorella (Ng, Bassham) (162) 254
- Photosynthesis
  - Reaction between primary and secondary electron acceptors of Photosystem II of --- (Forbush, Kok) (162) 243
- Photosynthesis
  - Role of P870 in bacterial --- (Parson) (153) 248
- Photosynthesis
  - Site of manganese function in --- (Cheniae, Martin) (153) 819
- Photosynthesising tissue
  - Glycollate metabolism in --- (Thompson, Whittingham) (153) 260
- Photosynthetic bacterium
  - Kinetic study of bacteriochlorophyll pheophytinization in the protein complex from a green --- (Ghosh, Broker, Olson) (162) 402
- Photosynthetic bacteria
  - Trace metal composition of --- (Kassner, Kamen) (153) 270
- Photosynthetic carbon assimilation
  - Inhibition, by sulphate, of the oxygen evolution associated with --- (Baldry, Cockburn, Walker) (153) 476
- Photosynthetic evolution of oxygen
  - Study of the thermal step of the --- by a cooling method (Etienne) (153) 895
- Photosynthetic intermediates
  - Photosynthesis by isolated chloroplasts. I. Diffusion of labelled --- between isolated chloroplasts and suspending medium (Bassham, Kirk, Jensen) (153) 211
- Photosynthetic mutants
  - Chloroplast reactions of --- of Scenedesmus obliquus (Pratt, Bishop) (153) 664
- Photosynthetic mutants
  - 520-nm light-induced absorbance change in --- of Scenedesmus (Pratt, Bishop) (162) 369
- Photosynthetic phosphorylation
  - --- and associated reactions in the presence of a new group of uncouplers: Salicylanilides (Black Jr.) (162) 294
- Photosynthetic plant materials
  - Electron paramagnetic resonance signal produced by ferricyanide in --- (Weaver) (162) 286
- Photosynthetic systems
  - Fluorescence chlorophyll in ---. IV. Induction of various emissions at low temperatures (Murata) (162) 106
- Photosynthetic systems
  - Relation between fluorescence and luminescence in --- (Lavorel) (153) 727
- Photosystems
  - Analysis of the interactions between the two --- in isolated chloroplasts (Joliot, Joliot, Kok) (153) 635
- Photosystems
  - Kinetic studies on electron-transport components in isolated chloroplasts. I. The effect of the pool of electron carriers between the two --- on P_{700} changes (Malkin) (162) 392
- Photosystems
  - Resolution of chlorophyll pigments in --- 1 and 2 spinach chloroplasts by low-temperature derivative spectroscopy (Cramer, Butler) (153) 889
- Photosystem II
  - Photoinhibition and excitation quenching

in --- of photosynthesis, from fluorescence induction measurements (Malkin, Jones) (162) 297

Photosystem II
Reaction between primary and secondary electron acceptors of --- of photosynthesis (Forbush, Kok)(162) 243

C-Phycocyanin
Cleavage of phycocyanobilin from --- (Chapman, Cole, Siegelman)(153) 692

Phycocyanobilin
Cleavage of --- from C-phycocyanin (Chapman, Cole, Siegelman)(153) 692

Phycoerythrin
Spectral change of --- from Hydrocoleum species and its relationship to protein dissociation. Effects of mercurials on single- and double-peaked forms (Pecci, Fujimori) (154) 332

Phytanic acid
Different ratios of the LDD and DDD diastereo-isomers of --- in patients with Refsum's disease (Eldjarn et al.)(164) 94

Phytanic acid
Occurrence of 4,8,12-trimethyltridecanoic acid in the tissues of rats fed high levels of --- (Hansen, Shortland, Prior)(152) 642

Phytanic acid
Separation and characterization of --- -containing plasma triglycerides from a patient with Refsum's disease (Laurell) (152) 75

Phytanyl diether analogs
Synthesis of the --- of phosphatidyl glycerophosphate and phosphatidyl glycerol present in Halobacterium cutirubrum (Joo, Kates)(152) 800

Phytochrome
--- in etiolated annual rye. III. Isolation of photoreversible phytochrome (Correll et al.)(168) 36

Phytochrome
--- in etiolated annual rye. IV. Physical and chemical characterization of phytochrome (Correll et al.)(168) 46

Phytochrome spectrum
--- of Pisum leaves and stems (Hillman) (162) 464

Phytoene
Occurrence of dehydrosqualene (C_{30} ---) in Staphylococcus aureus (Suzue, Tsukada, Tanaka)(164) 88

Phytohaemagglutinin
Inhibitory effects of hydrocortisone upon the --- induced RNA synthesis in human lymphocytes (Ono et al.)(161) 361

Phytohaemagglutinin
Isolation and composition of a glycopeptide from a --- of Phaseolus vulgaris (Takahashi, Liener)(154) 560

Phytohaemagglutinin
Non-specific --- found in Vicia cracca (Aspberg, Holmén, Porath)(160) 116

Phytohaemagglutinin
Protein-carbohydrate interaction. XX. On the number of combining sites on concanavalin A, the --- of the jack bean (So, Goldstein)(165) 398

Phytohaemagglutinin
Purification and physicochemical properties of a --- from Robinia pseudoaccacia. Isolation of an active glycopeptide (Bourrillon, Font)(154) 28

Phytohaemagglutinin
Studies on blood group substances. I. Purification of active material from hog gastric mucin by specific precipitation with Vicia cracca --- (Kristiansen, Porath)(158) 351

Phytosphingosine
Separation of sphingosine, dihydrosphingosine and --- by chromatography on columns of silica gel (Barenholz, Gatt) (152) 790

Phytosphingosine
Studies on sphingosines. XIII. The existence of --- in bovine kidney sphingomyelins (Karlsson, Steen)(152) 798

Phytosphingosine
Studies on sphingosines. XIV. On the --- content of the major human kidney glycolipids (Karlsson, Mártensson)(152) 230

Phytotoxin
Rhizobium-synthesized ---: An inhibitor of β-cystathionase in Salmonella typhimurium (Owens, Guggenheim, Hilton)(158) 219

Piericidin A
Effects of Bacillus subtilis protease, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose utilization and its inhibition by avenaciolide, --- and puromycin (Kuo)(165) 208

Piericidin A
--- and inhibition of respiratory chain activity in Escherichia coli K12 (Snoswell, Cox) (162) 455

Pigment-protein complexes
Isolation and properties of two digitonin-soluble --- from spinach (Wessels)(153) 497

Pineal body
Abundance of cystathionine in the ---. Free amino acids and related compounds of bovine pineal, anterior and posterior pituitary, and brain (LaBella, Vivian, Queen) (158) 286

Pisum sativum
Biosynthesis of phenylalanine and tyrosine in the pea (---): Chorismate mutase (Cotton, Gibson)(156) 187

Pisum sativum L.
Esterases of the pea (---) (Norgaard, Montgomery)(151) 587

Pituitary
Abundance of cystathionine in the pineal body. Free amino acids and related compounds of bovine pineal, anterior and posterior ---, and brain (LaBella, Vivian, Queen) (158) 286

Pituitary
Reaction of --- interstitial cell-stimulating hormone with periodate (Gan, Papkoff, Li) (170) 189

Pituitary gland
Preparation of polysomes from bovine anterior --- (Gospodarowicz, Laporte) (169) 212

Pituitary growth hormone
Human ---. XVI. Reduction with dithiothreitol in the absence of urea (Bewley, Dixon, Li) (154) 420

Pituitary growth hormone
Human ---. XVII. The hydrogen-deuterium exchange of the hormone (Squire, Ottesen) (154) 226

Pituitary peptides
--- with direct action on the carbohydrate metabolism and fatty acid metabolism (Bornstein et al.)(156) 31

Pituitary peptides
---. Naturally occurring analogues of porcine corticotropin (Lande et al.)(154) 429

Placentas
Isolation of 16-oxo-testosterone from human --- perfused in situ (Reynolds, Mancuso, Diczfalusy)(152) 438

Placenta
Studies on the mechanism of estrogen biosynthesis. V. Stereochemical comparison of aromatization in --- and microbiological systems (Brodie, Possanza, Townsley) (152) 770

Plakalbumin
Isolation of a large peptide from denatured --- (Smith)(154) 263

Plasma albumin
Binding of aflatoxin by --- in vitro (Visvanatha, Valmikinathan, Verghese)(165) 288

Plasmalogen
Biosynthesis of choline --- by ox heart (Poulos, Hughes, Cumings)(152) 629

Plasmalogens
Biosynthesis of ether-containing phospholipids in the slug, Arion ater. III. Origin of the vinylic ether bond of --- (Thompson Jr.) (152) 409

Plasmalogen metabolism
--- in developing rat brain: Aldehydes as a direct precursor in the formation of the vinyl ether linkage (Bell Jr., White Jr.) (164) 441

Plasma membrane
Characterization of the --- of Mycoplasma laidlawii. III. The formation and aggregation of small lipoprotein structures derived from sodium dodecyl sulphate-solubilized membrane components (Engelman, Morowitz)(150) 376

Plasma membrane
Characterization of the --- of Mycoplasma laidlawii. IV. Structure and composition of membrane and aggregated components (Engelman, Morowitz)(150) 385

Plasma membranes
Formation of S-acyl pantetheine from acyl-CoA by --- (Stahl, Trams)(163) 472

Plasma membranes
Hexokinase activity and glycolytic capacity of --- of hepatomas (Davidova, Shapot, Solowjeva)(158) 303

Plasma membrane
Infrared spectra of --- and endoplasmic reticulum of Ehrlich ascites carcinoma (Wallach, Zahler)(150) 186

Plasma membrane
Isolation of rat liver --- fragments (Graham, Higgins, Green)(150) 303

Plasma membranes
Lipid composition of rat-liver --- (Dod, Gray)(150) 397

Plasma membranes
Studies on ---. V. On the lipid dependence of some phosphohydrolases of isolated rat-liver plasma membranes (Emmelot, Bos) (150) 341

Plasma membranes
Studies on ---. VI. Differences in the effect of temperature on the ATPase and (Na^+-K^+)-ATPase activities of plasma membranes isolated from rat liver and hepatoma (Emmelot, Bos)(150) 354

Plasma membranes
Studies on ---. VII. A leucyl-β-naphthylamidase-containing repeating unit on the surface of isolated liver and hepatoma plasma membranes (Emmelot, Visser, Benedetti) (150) 364

Plasma membranes
Synthesis of lipids by liver ---. Incorporation of acyl-CoA derivatives into membrane lipids in vitro (Trams, Stahl, Robinson) (163) 459

Plasma protein
--- turnover and transmission to the milk in the rat (Morgan)(154) 478

Plasma steroids
Effect of ethanol on the concentrations of solvolyzable --- (Cronholm, Sjövall) (152) 233

Plasmin
--- inhibition by synthetic antifibrinolytic agents in relation to the type of substrate (Lukasiewicz et al.)(159) 503

Plasmin
Specificity of human --- on the B-chain of oxidized bovine insulin (Groskopf et al.) (168) 376

Plasminogen
Canine ---: Purification and a demonstration of multimolecular forms (Heberlein, Barnhart)(168) 195

Plasminogen
Purification of --- from human granulocytes using DEAE-Sephadex column chromatography (Prokopowicz)(154) 91

Plastocyanin
Site of action of --- in chloroplasts treated with detergent (Hind)(153) 235

Platelets
Adenine nucleotide metabolism of blood ---. I. Adenosine kinase and nucleotide formation from exogenous adenosine and AMP (Holmsen, Rozenberg)(155) 326

Platelets
Adenine nucleotide metabolism of blood ---. II. Uptake of adenosine and inhibition of ADP-induced platelet aggregation (Rozenberg, Holmsen)(155) 342

Platelets
Adenine nucleotide metabolism of blood ---. III. Adenine phosphoribosyl transferase and nucleotide formation from exogenous adenine (Holmsen, Rozenberg)(157) 266

Platelets
Adenine nucleotide metabolism of blood ---. IV. Platelet aggregation response to exogenous ATP and ADP (Rozenberg, Holmsen) (157) 280

Platelets
Preparation and properties of a glycoprotein from pigs' blood --- (Mullinger, Manley) (170) 282

Platelets
Release reaction and energy metabolism in blood --- with special reference to the burst in oxygen uptake (Mürer)(162) 320

Platelets
Studies on human ---. II. Protein synthetic activity of various platelet populations (Booyse, Hoveke, Rafelson Jr.)(157) 660

Platelet protein
Studies on human platelets. I. Synthesis of --- in a cell-free system (Booyse, Rafelson Jr.)(166) 689

Plumbous ion
Depolymerization of RNA by --- (Farkas) (155) 401

Polyadenylic acid
Azotobacter vinelandii RNA polymerase. V. Unprimed synthesis of --- polyuridylic acid (Krakow)(166) 459

Polyadenylic acid

Comparison of chloroquine binding to DNA, and --- and polyguanylic acid (Blodgett, Yielding)(169) 451

Polyadenylic acid biosynthesis
RNA biosynthesis and --- in tobacco leaf homogenates (Sachar)(169) 58

Polyadenylic acid synthesis
Activation by electrolytes and polylysine of --- by Clostridium perfringens polynucleotide phosphorylase (Fitt, Dietz Jr., Grunberg-Manago)(151) 99

Poly-L-alanine
Stereochemical criteria for polypeptides and proteins. VI. Non-bonded energy of polyglycine and --- in the crystalline β form (Venkatachalam)(168) 411

Polyamines
Effect of --- on the enzymatic degradation of ribosomes (Erdmann et al.)(157) 43

Polyamine
--- -inorganic cation interaction with ribosomes of Escherichia coli (Norton, Erdmann, Herbst)(155) 293

Polyamine
Mechanism of stimulation of --- synthesis by growth hormone in rat liver (Jänne, Raina, Siimes)(166) 419

Polyamino acids
Effects of ---, histones and heparin on amino acid incorporation into ribosomal proteins from rat liver (Berlinguet, Normand) (161) 509

Polyanion
Influence of ionic strength and a --- on transcription in vitro. II. Effects on the template efficiency of rat liver chromatin for a purified bacterial RNA polymerase (Chambon et al.)(157) 520

Polycyclic aromatic hydrocarbons
Hydrophobic interaction of --- with human serum albumin (Franke)(160) 378

Polyene antibiotic
Effect of cholesterol incorporation on the sensitivity of liposomes to the ---, filipin (Kinsky et al.)(152) 174

Polyenoic fatty acids
Distribution of odd-numbered essential and other --- in rat liver lipids (Sand, Schlenk)(164) 598

Polyenoic fatty acid synthesis
Effect of alloxan diabetes on --- by retinal tissue (Futterman, Rollins, Vacano) (164) 433

Polyethylene glycol
Alcohol oxidase, a flavoprotein from several Basidiomycetes species. Crystallization by fractional precipitation with --- (Janssen, Ruelius)(151) 330

Polyglycine
Stereochemical criteria for polypeptides and proteins. VI. Non-bonded energy of --- and poly-L-alanine in the crystalline β form (Venkatachalam)(168) 411

Polyguanylic acid
Comparison of chloroquine binding to DNA, and polyadenylic acid and --- (Blodgett, Yielding)(169) 451

Polyguanylic acid
Size, number and distribution of --- binding sites on the separated DNA strands of coliphage T_7 (Summers, Szybalski)(166) 371

Polylysine
Activation by electrolytes and --- of poly A synthesis by Clostridium perfringens polynucleotide phosphorylase (Fitt, Dietz Jr., Grunberg-Manago)(151) 99

Polylysine
Effect on univalent cations and the role of GTP and supernatant factors during biosynthesis of --- chain (Pulkrábek, Rychlík) (155) 219

Polylysine
Studies on the action of carboxypeptidase B on --- (Jones, Miller)(159) 411

Polymyxin B
Studies of the biosynthesis of --- (Daniels) (156) 119

Polynucleotides
Conformational stability of --- (Leng, Michelson)(155) 91

Polynucleotide
Extent and specificity of the degradation of --- chain under the conditions of the preparation of deuridylic RNA (Budowsky, Simukova, Guskova)(166) 755

Polynucleotides
Photochemistry of ---. II. Mononucleotide and dinucleotide fluorescence at ordinary temperatures (Leng, Pochon, Michelson) (169) 338

Polynucleotides
Photochemistry of ---. III. Study of the luminescence of polynucleotides at normal temperature (Pochon, Leng, Michelson) (169) 350

Polynucleotides
Studies on ---. LXXXIII. Synthesis in vitro of the tripeptide valyl-seryl-lysine directed by poly r-(G-U-A-A)(Kössel)(157) 91

Polynucleotides
Uptake of --- by mouse ascites tumour cells. V. Uptake of DNA (Schell)(166) 156

Polynucleotide analogues
---. XIII. Action of ribonuclease T_1 and of polynucleotide phosphorylase on various analogues (Michelson, Monny)(166) 294

Polynucleotide immobilized
Chromatographic studies with the --- in acrylamide gel matrix (Wada, Kishizaki) (166) 29

Polynucleotide phosphorylase
Activation by electrolytes and polylysine of poly A synthesis by Clostridium perfringens --- (Fitt, Dietz Jr., Grunberg-Manago) (151) 99

Polynucleotide phosphorylase
Polynucleotide analogues. XIII. Action of ribonuclease T_1 and of --- on various analogues (Michelson, Monny)(166) 294

Polyoma virus
Denaturation map of --- DNA (Bourguignon)(166) 242

Polyoma virus DNA
Electron microscopic study of the tertiary structure of covalently closed --- (Bourguignon, Bourgaux)(169) 476

Polypeptides
Enhancing action of synthetic and natural basic --- on erythrocyte-ghost phospholipid hydrolysis by phospholipase A (Klibansky et al.)(150) 15

Polypeptides
Stereochemical criteria for --- and proteins. VI. Non-bonded energy of polyglycine and poly-L-alanine in the crystalline β form (Venkatachalam)(168) 411

Polypeptides
Tentative rules. Abbreviated nomenclature of synthetic --- (polymerized amino acids)(IUPAC-IUB Commission on Bioche-

mical Nomenclature)(168) 1
Polypeptide chromatography
--- and protein chromatography on hydroxyapatite columns (Bernardi, Kawasaki)(160) 301
Polypeptide synthesis
Chain initiation during --- in a cell-free bacterial system programmed with plant viral messengers. I. Dependence on formylation and ribosomal factors (Reinecke et al.)(157) 566
Polypeptide synthesis
Chain initiation during --- in cell-free bacterial systems programmed with plant viral messengers. II. The role of N-formylmethionine (Hoogendam et al.)(157) 579
Polyporus
Occurrence of α(1-3)glucan in Cryptococcus, Schizosaccharomyces and --- species, and its hydrolysis by a Streptomyces culture filtrate lysing cell walls of Cryptococcus (Bacon et al.)(158) 313
Polyporus obtusus
Carbohydrate oxidase, a novel enzyme from ---. I. Isolation and purification (Ruelius, Kerwin, Janssen)(167) 493
Polyporus obtusus
Carbohydrate oxidase, a novel oxidase from ---. II. Specificity and characterization of reaction products (Janssen, Ruelius)(167) 501
Polyporus versicolor
Degradation of the lignin model compound syringylglycol-β-guaiacyl ether by --- and Stereum frustulatum (Kirk, Harkin, Cowling)(165) 145
Polyporus versicolor
Oxidation of guaiacylglycerol-β-guaiacyl ether and veratrylglycerol-β-guaiacyl ether by --- and Stereum frustulatum (Kirk, Harkin, Cowling)(165) 134
Polyriboadenylate polymerase
--- and its inhibition in T_4-infected Escherichia coli and Shigella dysenteriae (Colvill, Terzi)(155) 394
Poly ribo(G-U-A-A)
Studies on polynucleotides. LXXXIII. Synthesis in vitro of the tripeptide valyl-seryl-lysine directed by --- (Kössel)(157) 91
Polyribosomes
--- in Azotobacter vinelandii. I. Isolation, characterization and distribution of ribosomes, polyribosomes and subunits in logarithmically growing Azotobacter (Oppenheim et al.)(161) 386
Polyribosomes
Interaction between reticulocyte --- and isolated human haemoglobin polypeptide chains (Fischer, Nagel, Fuhr)(169) 566
Polyribosomes
Ribonuclease and trypsin treatment of ribosomes and --- from sea urchin eggs (Piatigorsky)(166) 142
Polyribosome
Studies on messenger RNA from peanut plants: In vitro --- formation and protein synthesis (Jachymczyk, Cherry)(157) 368
Polyribosome
Thymidine kinase and --- distribution in regenerating rat liver following 5-azacytidine (Cihák, Veselá, Sorm)(166) 277
Polyribosome reduction
--- and recovery following neutron exposure of regenerating liver (Yatvin et al.)(169) 536
Polyribouridylic acid
Interaction of mercurials with helical and random --- (Millar)(166) 628
Polysaccharides
Effect of serum hyaluronidase on acidic --- and its activity in cancer (Herp, DeFilippi, Fabianek)(158) 150
Polysaccharide
Intracellular localization of a 6-O-methyl-D-glucose containing soluble --- from Mycobacterium tuberculosis (Lornitzo, Goldman)(158) 329
Polysaccharide
Significance of the size of the --- portion for adjuvanticity of a peptidoglycolipid (wax D) of Mycobacteria (Koga, Ishibashi, Sugiyama, Tanaka)(158) 144
Polysaccharide
Structure of the --- of wax D from human strain of Mycobacterium tuberculosis (Vilkas, DeLaumerny, Nacasch)(158) 147
Polysaccharide chains
Conformational analysis of monosaccharide moieties in --- in solution (Hirano et al.)(156) 213
Polysomal profiles
Effects of aflatoxin B_1 on --- and RNA synthesis in rat liver (Roy)(169) 206
Polysomes
Breakdown and re-formation of --- in Escherichia coli during inhibition of protein synthesis (Ennes, Sells)(161) 503
Polysomes
Chloroplast and cytoplasmic --- and ribosomal RNA from wheat (Mehta, Hadziyev, Zalik)(169) 381
Polysome
Comparison of the effect of amino acid supply on hepatic --- profiles in vivo and in vitro (Pronczuk et al.)(157) 204
Polysomes
Configuration of --- in solution (Filson, Bloomfield)(155) 169
Polysome
Effect of chloramphenicol on the --- formation of starved stringent Escherichia coli (Cameron, Julian)(169) 373
Polysome
Epidermal growth factor. III. The stimulation of --- formation in chick embryo epidermis (Cohen, Stastny)(166) 427
Polysome
Involvement of adrenal steroids in the changes of --- organization during feeding of unbalanced amino acid diets (Cammarano et al.)(155) 302
Polysomes
Phenethyl alcohol: Reversible inhibition of synthesis of macromolecules and disaggregation of --- in rat hepatoma cells (Plagemann)(155) 202
Polysomes
Preparation of --- from bovine anterior pituitary gland (Gospodarowicz, Laporte)(169) 212
Polysome distribution
Ribosomal subunits of Landschütz ascites cells during changes in --- (Hogan, Korner)(169) 129
Polysome formation
Role of ribosomal subunits and 80-S monomers in --- in an ascites tumour cell (Hogan, Korner)(169) 139
Polyunsaturated acids
Incorporation of long-chain and --- into

  - phosphatidate and phosphatidylcholine (Hill, Lands)(152) 645
- Polyuridylic acid
  - Azotobacter vinelandii RNA polymerase. V. Unprimed synthesis of polyadenylic acid --- (Krakow)(166) 459
- Polyuronides
  - --- in cell walls of Mucor rouxii (Bartnicki-Garcia, Reyes)(170) 54
- Polyuronides
  - Periodate oxidation, pK_a and conformation of hexuronic acids in --- and mucopolysaccharides (Scott)(170) 471
- Porphobilinogen deaminase
  - Separation of --- and uroporphyrinogen III cosynthetase from human erythrocytes (Stevens, Frydman, Frydman)(158) 496
- Porphyrin a
  - Cryptoporphyrin and --- from pigeon-breast muscle (Lemberg, Gilmour)(156) 407
- Porphyrin biosynthesis
  - ---. IV. 5- and 6-COOH porphyrinogens (type III) as normal intermediates in haem biosynthesis (San Martin de Viale, Grinstein) (158) 79
- Porphyrin biosynthesis
  - --- in soybean callus tissue system. Isolation, purification and general properties of δ-aminolaevulinate dehydratase (Tigier, Battle, Locascio)(151) 300
- Porphyrin synthesis
  - Action of 2-methyl-2-n-propyl-1,3-propanedioldicarbamate on the --- and haem synthesis in Achromobacter metalcaligenes (Doss)(170) 461
- Porphyrinogen
  - Porphyrin biosynthesis. IV. 5- and 6-COOH --- (type III) as normal intermediates in haem biosynthesis (San Martin de Viale, Grinstein)(158) 79
- Potassium
  - Differential effect of sodium and --- on calcium adsorption to stearic acid monolayers (Yamauchi et al.)(150) 181
- Potassium
  - Influx of --- into Chlorella pyrenoidosa (Barber)(163) 141
- Potassium
  - Role of --- in the uptake of carbon dioxide by Micrococcus sodonensis (Perry) (165) 538
- Potassium-activated phosphatase
  - Effects of ATP and Na^+ on a --- from erythrocyte cell membranes (Raga, Garrahan, Pouchan)(150) 742
- Potassium-dependent phosphatase
  - Presence of --- in intestinal epithelial cell brush borders isolated by a new method (Boyd, Parsons, Thomas)(150) 723
- Potassium efflux
  - --- from Chlorella pyrenoidosa (Barber) (163) 531
- Potassium influx
  - --- into Chlorella pyrenoidosa (Barber) (163) 141
- Potassium ion
  - Rates of action of --- and ouabain on the sodium pump in squid axons (Baker, Manil) (150) 328
- Potassium transport
  - Anion-stimulated ATPase from the --- midgut of the larva of Hyalophora cecropia (Turbeck, Nedergaard, Kruse)(163) 354
- Potential
  - Transmural electrical --- across rat jejunum: Effects of eversion and rapid temperature changes (Baker et al.)(150) 649
- Potential differences
  - Electrical --- in the biliary tree (London, Diamond, Brooks)(150) 509
- Pre-biological evolution
  - Studies on ---. III. Azulmic acids obtained from ammonium cyanide (Labadie, Jensen, Neuzil)(165) 525
- Precursors
  - Localization of ribosome --- in Escherichia coli (Di Girolamo, Hinckley, Busiello) (169) 387
- Precursor
  - Methylation of ribosomal RNA --- and tRNA in rat liver (Muramatsu, Fujisawa) (157) 476
- Precursors
  - --- of ribosomal sub-units in Tetrahymena pyriformis (Leick, Plesner)(169) 409
- Pregnancy
  - Tryptophan pyrrolase activity during --- (Greengard, Kalinsky, Manning)(156) 198
- 5-[4-^{14}C]Pregnenolone
  - Free steroid biosynthesis from --- in normal human adrenal tissue (Axelrod, Goldzieher)(152) 391
- [7α-^{3}H]Pregnenolone
  - Pathways for androgen biosynthesis from --- and [4-^{14}C]progesterone by rat testis interstitium in vitro (Bell et al.)(164) 412
- Pre-phospholipase A
  - Effects of phospholipase A and --- on black phospholipid membranes (Lesslauer et al.) (150) 306
- Primer
  - Rapid isolation of a regenerating rat liver DNA nucleotidyltransferase fraction which shows a preference for native DNA as --- (Bellair)(161) 119
- Proflavine
  - Binding of --- to transfer RNA: Dependence on secondary structure (Grosjean, Werenne, Chantrenne)(166) 616
- Proflavine
  - Effect of --- on yeast cells (Witt, Neufang, Müller)(170) 216
- Progesterone
  - 5α-Androst-16-en-3-one biosynthesis from --- by boar testis homogenate (Katkov, Gower)(164) 134
- Progesterone
  - Incorporation of molecular oxygen into testosterone acetate directly derived from --- by Cladosporium resinae (Nakano, Sato, Tamaoki)(164) 585
- Progesterone
  - Microbial degradation of --- to α-ketoglutaric acid and succinic acid (Schubert et al.) (152) 401
- Progesterone
  - Microbial hydroxylations. II. Oxidative cleavage on the 17β-acetyl side-chain of --- by Aspergillus ochraceus (Tan, Smith) (152) 758
- [4-^{14}C]Progesterone
  - Pathways for androgen biosynthesis from [7α-^{3}H]pregnenolone and --- by rat testis interstitium in vitro (Bell et al.)(164) 412
- Progesterone-binding affinity
  - Steroid-protein interactions. XX. Effects of chemical modifications on --- of α_1-acid glycoprotein (Ganguly, Westphal)(170) 309
- Progoitrin
  - 2-Amino-6-(methylthio)caproic acid, a me-

thionine homolog and precursor of --- (Lee, Serif)(165) 569
Prolactin
Purification of rat --- and growth hormone using preparative polyacrylamide gel electrophoresis (Groves, Sells)(168) 113
Proline
Role of glutamic acid as a precursor of collagen --- and hydroxyproline (Ishibashi, Ide, Tsurufuji)(165) 296
Proline hydroxylation
--- by oxygen (Bade, Gould)(156) 425
Proline transport
Amino acid transport by the small intestine of the rat. Effects of glucose on transintestinal --- and valine transport (Munck) (150) 82
Propanediol dehydratase
Coenzyme activity of 5'-deoxyadenosyl10-chlorocobalamin in --- system (Tamao et al.) (151) 260
Propionate ions
Stability of electrical coupling in leech giant nerve cells: Divalent cations, ---, tonicity and pH (Payton, Loewenstein)(150) 156
Propionylcarnitine
--- in animal tissue (Bøhmer, Bremer) (152) 440
Propionylcarnitine
Formation of --- in isolated rat liver mitochondria (Bøhmer)(164) 487
Propionylcarnitine
--- . Physiological variations in vivo (Bøhmer, Bremer)(152) 559
Propionyl coenzyme A carboxylase
Activation of pig heart --- by potassium ions (Edwards, Keech)(159) 167
Proplastids
Sedimentation studies on RNA from --- of Zea mays (Jacobson, Williams)(169) 7
Prostaglandin
In vitro effect of --- and dietary fats on lipolysis and esterification in rat adipose tissue (Pawar, Tidwell)(164) 167
Prostaglandins
Phospholipid precursors of --- (Lands, Samuelsson)(164) 426
Prostaglandin synthesis
Inhibition of --- by oleic, linoleic and linolenic acids (Pace-Asciak, Wolfe)(152) 784
Prostaglandin synthetase
Action of --- on 2-arachidonyl-lecithin (Vonkeman, Van Dorp)(164) 430
Prostate function
Possible mechanism of regulation of rat --- by testosterone (Farnsworth)(150) 446
Protease
Characteristics of extracellular --- formation by Bacillus subtilis and its control by amino acid repression (May, Elliott) (157) 607
Protease
Effects of Bacillus subtilis ---, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose utilization and its inhibition by avenaciolide, piericidin A and puromycin (Kuo)(165) 208
Proteins
Ammonium interactions with --- (Barker) (168) 447
Proteins
Association of lipids and --- in chloroplast lamellar membrane (Ji, Benson)(150) 686
Protein
Binding of lipid to --- in the low-density lipoprotein from the hen's egg (Evans et al.) (164) 566
Protein
Binding of urate to --- of human and rabbit plasma (Sheikh, Møller)(158) 456
Protein
Determination of molecular weights of microgram quantities of --- components from biological membranes and other complex mixtures: Gel electrophoresis across linear gradients of acrylamide (Thorun, Mehl) (160) 132
Protein
Determination of the molecular weight of a --- most closely corresponding to its amino acid analysis (Delaage)(168) 573
Proteins
Electron spin resonance of iron-nitric oxide complexes with amino acids, peptides and --- (Woolum, Tiezzi, Commoner) (160) 311
Protein
General study on the adsorption of --- by tissue (King)(154) 269
Proteins
New class of structural --- from connective tissue, (Timpl, Wolff, Weiser)(168) 168
Proteins
Proton wide-line nuclear magnetic resonance spectra of hydrated --- (Blears, Danyluk)(154) 17
Proteins
Reaction of alloxan with thiol groups of ---. Blockage of the reactivation of reduced ribonuclease (Younathan, Rudel)(168) 11
Protein
Reaction of N-methyl-N'-nitro-N-nitrosoguanidine with --- (Sugimura et al.) (170) 427
Proteins
Reaction of tyrosine residues in --- with carbodiimide reagents (Carraway, Koshland Jr.)(160) 272
Protein
Relationship between soluble and insoluble --- in the lens (Zigman, Lerman) (154) 423
Proteins
Reversible acetoacetylation of amino groups in --- (Marzotto et al.)(154) 450
Proteins
Studies on the direct neutral penicilloylation of functional groups occurring on --- (Schneider, De Weck)(168) 27
Protein
Studies on extracellular --- from Staphylococcus aureus. III. Investigations on the heterogeneity of hyaluronate lyase using the method of isoelectric focusing (Vesterberg) (168) 218
Proteins
Studies on extracellular --- from Staphylococcus aureus. IV. Separation of α-toxin by isoelectric focusing (Wadström)(168) 228
Proteins
Subunit structure of fibrous muscle --- as determined by osmometry (McCubbin, Kay)(154) 239
Proteins
Ultraviolet dichroism of muscle --- (Oikawa, Kay, McCubbin)(168) 164
Proteins
Virus-specific --- in Escherichia coli infected with some amber mutants of phage MS2 (Viñuela et al.)(155) 558

Protein antigen
Isolation of an organ-specific --- from cell-surface membrane of rat liver (Neville Jr.) (154) 540
Protein biosynthesis
Injury and plasma ---. I. Hepatic nucleic acid metabolism (Chandler, Neuhaus) (166) 186
Protein breakdown
---: Peptide cleavage of the X-Pro-Y type by kidney peptidases (Nordwig, Dehm) (160) 293
Protein-carbohydrate
--- interaction. XX. On the number of combining sites on concanavalin A, the phytohaemagglutinin of the jack bean (So, Goldstein)(165) 398
Protein chromatography
Polypeptide chromatography and --- on hydroxyapatite columns (Bernardi, Kawasaki)(160) 301
Protein component
Release of a macromolecular --- from human erythrocyte ghosts (Harris)(150) 534
Protein composition
--- of ribosomes and ribosomal subunits from animal tissues. Electrophoretic studies (Di Girolamo, Cammarano)(168) 181
Protein constituents
--- of plant ribosomes (Lyttleton)(154) 145
Protein crosslinking
Probable --- with tetranitromethane (Doyle, Bello, Roholt)(160) 274
Protein hybridization
Radiation-induced --- (Radola)(160) 469
Protein kinase
Comparative study of mitochondrial and soluble rat liver --- (Pinna, Moret, Siliprandi)(159) 563
Protein-polysaccharide complex
--- of bovine nasal cartilage. Studies on the molecular organisation (Serafini-Fracassini)(170) 289
Protein-steroid interactions
--- studied by fluorescence quenching (Attallah, Lata)(168) 321
Protein structure
Fluorescence and ---. XIII. Further effects of side-chain groups (Russell, Cowgill) (154) 231
Protein structure
Fluorescence and ---. XIV. Tyrosine fluorescence in a helical muscle proteins (Cowgill)(168) 417
Protein structure
Fluorescence and ---. XV. Tryptophan fluorescence in a helical muscle protein (Cowgill)(168) 431
Protein structure
Fluorescence and ---. XVI. Detergents bound to muscle proteins (Cowgill) (168) 439
Protein subunits
--- in dormant and germinating soybean seeds (Catsimpoolas et al.)(168) 122
Protein synthesis
Azaguanine inhibition of ---. III. Site of action in HeLa cells (Zimmerman)(157) 378
Protein synthesis
Breakdown and re-formation of polysomes in Escherichia coli during inhibition of --- (Ennis, Sells)(161) 503
Protein synthesis
Comparison of the rates of RNA and --- in Escherichia coli cells partially starved for different amino acids (Ezekiel, Blumenthal) (161) 494
Protein synthesis
Effect of cycasin on --- (Shank)(166) 578
Protein synthesis
Ethionine-induced inhibition of --- in male and female rats. Lack of effect on intestinal mucosa (Schlunk, Longnecker, Lombardi) (158) 425
Protein synthesis
Inhibition of cell-free --- by homogentisic acid (Raghupathy, Peterson, McKean) (161) 575
Protein synthesis
Inhibition of --- by an RNA fraction from myeloblastosis virus (Olson, Deeney, Beaudreau)(161) 532
Protein synthesis
--- in isolated rat spleen nuclei (Tsuzuki, Naora)(169) 550
Protein synthesis
Mechanism of inhibition of --- by spiramycin (Ahmed)(166) 205
Protein synthesis
--- and ribosomal distribution at different growth stages in Bacillus stearothermophilus (González, Goldemberg, Algranati) (166) 760
Protein synthesis
Selective suppression of nucleolar RNA metabolism in the absence of --- (Higashi et al.)(166) 388
Protein synthesis
Stability of peptidyl-tRNA. The intermediate of --- (Bresler et al.)(155) 465
Protein synthesis
System in vitro for the RNA synthesis and --- by isolated salivary glands and by nuclei from Chironomus larvae (Ristow, Arends) (157) 178
Protein synthesizing activity
Studies on the conidia of Aspergillus oryzae. VII. Development of --- during germination (Horikoshi, Ikeda)(166) 505
Protein synthesizing systems
Biogenesis of mitochondria. IV. The differentiation of mitochondrial and cytoplasmic --- in vitro by antibiotics (Lamb, Clark-Walker, Linnane)(161) 415
Protein synthetic activities
--- of mycobacterial ribosomes in vivo (Fukuyama, Tani)(155) 611
Protein turnover
Plasma --- and transmission to the milk in the rat (Morgan)(154) 478
Proteinases
Characterization of three --- from French beans (Wells)(167) 388
Proteinase
Effect of --- on the (Na⁺ + K⁺)-activated ATPase system of rat brain (Somogyi) (151) 421
Proteinase
Isolation and properties of an extracellular --- of Trichophyton granulosum (Day et al.)(167) 597
Proteinase
Non-discriminating --- of Penicillium notatum. Partial purification and specificity (Marshall, Manion, Porath)(151) 414
Proteinase
Peptide substrates for a --- of Clostridium histolyticum (McQuade, Crewther) (167) 619
Proteinase

Primary structure at the DFP-reacting site of a --- from a strain of Arthrobacter (Wählby)(151) 409
Proteinase
Pseudocollagenase: A --- from Clostridium histolyticum (Mitchell)(159) 554
Proteinase
Purification and characterization of a --- from Candida albicans (Remold, Fasold, Staib)(167) 399
Proteinase
Purification and properties of a neutral --- from calf thymus nuclei (Furlan, Jericijo, Suhar)(167) 154
Proteinases
Studies on glycoproteins. XVII. Purification of O-seryl-N-acetylgalactosaminide glycohydrolase. Its complete separation from N-acetyl-β-D-hexosaminidase and --- (Schauer, Gottschalk)(156) 304
Proteinase
Studies on Streptomyces griseus ---. I. Separation of DFP-reacting enzymes and purification of one of the enzymes (Wåhlby)(151) 394
Proteinase
Studies on Streptomyces griseus ---. II. The amino acid sequence around the reactive serine residue of DFP-sensitive components with esterase activity (Wåhlby, Engström)(151) 402
Proteinase
Use of --- in the study of ribosomal structure (Ostner, Hultin)(154) 376
Proteinoids
Binding of basic --- with organismic or thermally synthesized polynucleotides (Waehneldt, Fox)(160) 239
Proteinoids
Thermal synthesis of neutral and basic --- (Fox, Waehneldt)(160) 246
Proteus mirabilis
Studies on the ribonuclease activity of --- (Center, Behal)(151) 698
Prothrombin
Action of human thrombokinase on human --- and p-tosyl-L-arginine methyl ester (Aronson, Ménaché)(167) 378
Protochlorophyllide
--- aggregation in solution and associated spectral changes (Seliskar, Ke)(153) 685
Protocollagen
Studies on the synthesis and intracellular accumulation of --- in organ culture of embryonic cartilage (Bhatnagar, Kivirikko, Prockop)(154) 196
Protocollagen hydroxylase
Connective tissue. XVII. --- of pig uterus (Kao et al.)(151) 568
Protocollagen hydroxylase
Kinetic patterns of --- and further studies on the polypeptide substrate (Kivirikko, Bright, Prockop)(151) 558
Proton uptake
Analysis of light-induced --- in isolated chloroplast (Karlish, Avron)(153) 878
Protoplasts
Effects of high electric fields on micro-organisms. III. Lysis of erythrocytes and --- (Sale, Hamilton)(163) 37
Protoplast-bursting factor
Inhibition of the synthesis of alkaline phosphatase of Bacillus megaterium KM by a novel --- obtained from Bacillus subtilis 202-7 (Arima, Tsukagoshi, Tamura) (163) 121
Pseudocollagenase
---: A proteinase from Clostridium histolyticum (Mitchell)(159) 554
Pseudomonas denitrificans
Some properties of a nitrite reductase from --- (Radcliffe, Nicholas)(153) 545
Pseudomonas rubescens
Glucosyl diglycerides from --- (Wilkinson) (164) 148
Pseudouridine
Modification of nucleosides and nucleotides. VII. Selective cyanoethylation of inosine and --- in yeast transfer RNA (Yoshida, Ukita)(157) 455
Pseudouridine
Modification of nucleosides and nucleotides. VIII. The reaction rates of --- residues with acrylonitrile and its relation to the secondary structure of transfer RNA (Yoshida, Ukita)(157) 466
Psychrophile
Temperature-induced lesion in amino acid-transfer ribonucleic acid attachment in a --- (Malcolm)(157) 493
Pulse radiolysis
One-electron reactions in biochemical systems as studied by ---. I. NAD and related compounds (Land, Swallow)(162) 327
Purine
Accelerated --- biosynthesis de novo in skin fibroblasts deficient in hypoxanthine-guanine phosphoribosyltransferase activity (Rosenbloom et al.)(166) 258
Purine
NMR study of the interaction of --- and pyrimidine derivatives with acridine orange (Hruska, Danyluk)(161) 250
Purines
Studies on the photodynamic reaction of --- and purine analogues with methylene blue (Friedman)(166) 1
Purine analogues
Studies on the photodynamic reaction of purines and --- with methylene blue (Friedman)(166) 1
Purine biosynthesis
Accelerated --- de novo in skin fibroblasts deficient in hypoxanthine-guanine phosphoribosyltransferase activity (Rosenbloom et al.)(166) 258
Purine biosynthesis
Control of --- de novo by orotic acid in vivo and in vitro (Rajalakshmi, Handschumacher)(155) 317
Purine breakdown
Induction and repression of the enzymes of --- in Aspergillus nidulans (Scazzocchio, Darlington)(166) 557
Purine nucleoside phosphorylase
Properties of a mutant of Escherichia coli lacking --- (Ahmad, Barth, Pritchard) (161) 581
Purine nucleotides
Degradation pathways and patterns of --- in rabbit heart, liver and kidney tissue after circulation stoppage (Busch, Von Borcke, Martinez)(166) 547
Purine stacking
---: Effects of alkyl substituents (Helmkamp, Kondo)(157) 242
Puromycin
Effects of Bacillus subtilis protease, Type VIII (subtilopeptidase A) on isolated adipose cells. Fructose utilization and its inhibi-

tion by acenaciolide, piercidin A and --- (Kuo)(165) 208
Puromycin
Cross resistance of Escherichia coli B ribosomes to inhibition of the --- reaction by erythromycin, spiramycin and chloramphenicol (Cerná, Rychlik)(157) 436
Puromycin
Noradrenalin-induced increase in hepatic cholesterol synthesis and its blockade by --- (Bortz)(152) 619
Puromycin
RNA synthesis by mammalian cells treated with the aminonucleoside of --- (Taylor, Stanners)(155) 424
Putrescine
Differential effects of ---, cadaverine and glyoxalbis(guanylhydrazone) on DNA- and nucleohistone-supported DNA synthesis (Schwimmer)(166) 251
Pyridoxal
Inhibition of invertases by --- and its analogues (Pressey)(159) 414
Pyridoxine glucoside
Microbial formation of ---, a new derivative of vitamin B_6 (Ogata et al.)(165) 578
Pyrimidine
Influence of cycloheximide (actidone) upon --- nucleotide metabolism and RNA synthesis in cocklebur leaf discs (Ross)(166) 40
Pyrimidine
NMR study of the interaction of purine and --- derivatives with acridine orange (Hruska, Danyluk)(161) 250
Pyrimidine deoxyribonucleoside phosphorylase
---. I. Substrate inhibition by thymine (Lyon Jr.)(159) 38
Pyrimidine dimers
Ultraviolet-induced --- in Tetrahymena. I. Removal in the dark (Whitson, Francis, Carrier)(161) 285
Pyrimidine isostichs
Nucleotide clusters in DNA. III. Separation of --- according to base composition (Cerny, Mushynski, Spencer)(169) 349
Pyrimidine metabolism
Effect of methotrexate on --- in regenerating rat liver (Coward, Morse Jr., Gentry) (155) 605
Pyrithiamine
Role of thiamine in nervous tissue: The mechanism of action of --- (Cooper)(156) 368
Pyrophosphatase
Inorganic --- activity of human placental alkaline phosphatase (Sussman, Laga) (151) 281
Pyrophosphatase
--- from mammalian tissues specific for derivatives of ADP (Rodriguez, Bass, Hansen)(167) 199
Pyrophosphorylase
Study of --- activities in maize endosperm (Vidra, Loerch)(159) 551
Pyruvate
Reactions of NAD^+ and --- (Di Sabato) (167) 646
Pyruvate carboxylase
Reactive lysine residue at the allosteric site of sheep kidney --- (Keech, Farrant) (151) 493
Pyruvate kinase
Effect of cations on the electrophoretic mobility and substrate binding properties of --- (Betts, Evans)(167) 190
Pyruvate kinase
Estradiol induction of --- in the rat uterus (Jiménez de Asúa, Rozengurt, Carminatti) (170) 254
Pyruvate kinase
Simple and rapid procedure for the preparation of phosphopyruvate hydratase free from phosphoglycerate phosphomutase and --- (Grisolia, Bogart, Torralba)(151) 298
Pyruvate metabolism
Phosphoenolypyruvate metabolism and --- in the adult liver fluke, Fasciola hepatica (Prichard, Schofield)(170) 63
Pyruvate oxidation
Nature of malonate-insensitive --- and glutamate oxidation by heart sarcosomes (Davis)(162) 1
Pyruvate phosphoroclastic activity
Control of --- in extracts of Clostridium pasteurianum by ADP and acetyl phosphate (Biggins, Dilworth)(156) 285

Q

Quinic acid
- Isolation and identification of N-acetylanthranilic acid from --- metabolism by Aerobacter aerogenes(Ratledge(156) 215

Quinones
- --- of Athiorhodaceae(Maroc, De Klerk, Kamen)(162) 621

R

Radical
  Electron paramagnetic resonance observations on biogenic semiquinone radical and 5-methyl phenazinium --- (Ishizu et al.) (165) 283

γ-Radiation
  Effect of --- on aqueous solutions of DNA's of different base composition (Rafi, Weiss, Wheeler)(169) 230

Radiolysis
  --- of aqueous solutions of DNA and related substances; reaction of hydrogen atoms (Scholes, Simic)(166) 255

Radiolysis
  Incorporation of hydrogen into products of thymine radiolysis (Drasil, Ryznar, Juraskova)(166) 600

Radiometry
  --- of electron microscopic preparations (Müller, Nielsen)(165) 544

Rana temporaria L.
  The role of glycolysis in energy production in the isolated skin of the brown frog (---) (Kristensen, Schousboe)(153) 132

Rats
  Effects of L-carnitine on utilization of ketone bodies and glucose in eviscerated --- and in nephrectomized --- (Söling, Appels) (158) 162

Rat liver RNA
  RNA fraction in normal --- and Morris 5123D hepatoma (Mizuno, Hof, Collin) (166) 656

Reactivation
  Partial --- of irradiated phage P_1 by strain B_{S2} of Escherichia coli (Donch, Greenberg) (166) 271

Redox potential
  --- of fungal p-diphenol oxidase (Fee, Malmström)(153) 299

Refsum's disease
  Different ratios of the LDD and DDD diastereoisomers of phytanic acid in patients with --- (Eldjarn et al.)(164) 94

Refsum's disease
  Separation and characterization of phytanic acid-containing plasma triglycerides from a patient with --- (Laurell)(152) 75

Regenerating liver
  Molecular mechanisms of liver regeneration. VI. Incorporation of [^{14}C]orotic acid into cytoplasmic RNA in normal and --- (Fausto, Van Lancker)(161) 32

Regenerating rat liver
  Studies on (Na^+-K^+)-activated ATPase. XXI. Changes in (Na^+-K^+)-activated ATPase activity and ouabain-sensitive $^{86}Rb^+$ uptake rate in --- (Bakkeren, Bonting)(150) 467

Regenerating rat liver
  Thymidine kinase and polyribosome distribution in --- following 5-azacytidine (Cihák, Veselá, Šorm)(166) 277

Regulation of nucleotide level
  Study of adenosine 5'-mono-, di- and triphosphates in plant tissues. IV. ---, in vivo, by adenylate kinase: Theoretical and experimental study (Bomsel, Pradet) (162) 230

Reichstein's compound S
  Hydroxylation of --- with cell-free preparations from Curvularia lunata (Zuidweg) (152) 144

Relaxed Escherichia coli
  Isolation and properties of undermethylated phenylalanine transfer RNA from a --- mutant (Shugart, Novelli, Stulberg)(157) 83

Relaxed Escherichia coli
  RNA synthesis in --- and "stringent" Escherichia coli. Breakdown of preformed ribonucleoprotein particles and subsequent RNA synthesis (Dalgarno, Gros)(157) 64

Renal cell membranes
  (Na^+-K^+)-activated ATPase in --- of normal and methylprednisolone-treated rats (Manitius, Bensch, Epstein)(150) 563

Renal cortex slices
  Effect of storage at 4° on amino acid transport by rat --- (Lowenstein et al.)(150) 416

Renal cortex slices
  Influence of size of rat --- on amino acid accumulation (Smith, Segal)(163) 281

Renal cortical cells
  Interaction of K^+, ouabain and Na^+ on the cation transport and respiration of --- of hamsters and ground squirrels (Willis) (163) 516

Renal cortical slices
  Extracellular space in rat --- incubated at 0.5° and 25° (Macknight)(163) 85

Renal cortical slices
  Ouabain inhibition of ion transport and respiration in --- of ground squirrels and hamsters (Willis)(163) 506

Renal cortical slices
  Regulation of cellular volume during anaerobic incubation of rat --- (Macknight) (163) 557

Renal cortical slices
  Water and electrolyte contents of rat --- incubated in medium containing P-chloromercuribenzoic acid or P-chloromercuribenzoic acid and oubain (Macknight) (163) 500

Renal cortical slices
  Water and electrolyte contents of rat --- incubated in potassium-free media and media containing ouabain (MacKnight) (150) 263

Renal papilla
  Amino acid transport in the rat --- (Lowenstein, Smith, Segal)(150) 73

Renal tubules
  Amino acid transport by isolated rabbit --- (Hillman, Albrecht, Rosenberg)(150) 528

Rennin-sensitive linkage
  Tryptic peptide with the --- of cow's κ-casein (Jollès, Alais, Jollès)(168) 591

Repair replication
  Evidence for --- HeLa cell DNA damaged by ultraviolet light (Cleaver, Painter)(161) 552

Replicative deoxynucleotidyl transferase
  Facile separation of terminal deoxynucleotidyl transferase and --- of Walker-256 carcinosarcoma (Rothschild, Halpern, Smith)(169) 218

Repression
  Catabolite --- of aconitate hydratase in Bacillus subtilis (Cox, Hanson)(158) 36

Repression
  Catabolite --- of the synthesis of β-galactosidase in Proteus mirabilis F-lac (Colby Jr., Martin, Hu)(157) 159

Repression

Characteristics of extracellular protease formation by Bacillus subtilis and its control by amino acid --- (May, Elliott)(157) 607

Repression
--- of isocitrate lyase synthesis in seeds germinated in the presence of glucose (Lado, Schwendimann, Marrè)(157) 140

Reseda lutea L.
m-Carboxy-substituted aromatic amino acids in plant metabolism. IV. Transformation of 3-(3-carboxyphenyl) alanine into 3-(3-carboxy-4-hydroxyphenyl) alanine in --- and Reseda odorata L. (Larsen, Sørensen) (156) 190

Reseda odorata L.
m-Carboxy-substituted aromatic amino acids in plant metabolism. IV. Transformation of 3-(3-carboxyphenyl) alanine into 3-(3-carboxy-4-hydroxyphenyl) alanine in Reseda lutea L. and --- (Larsen, Sørensen) (156) 190

Reserpine
Inhibition of cyclic 3', 5'-nucleotide phosphodiesterase by phenothiazine and --- derivatives (Honda, Imamura)(161) 267

Respiration
Interactions between photosynthesis and --- in Chlorella. I. Types of transients of oxygen exchange after short light exposures (Ried)(153) 653

Respiration
Interaction of K+, ouabain and Na+ on the cation transport and --- of renal cortical cells of hamsters and ground squirrels (Willis)(163) 516

Respiration
Loss of viability and --- of Bacillus subtilis grown in peptone medium supplemented with glucose (Baillie, Holms)(170) 442

Respiration
Ouabain inhibition of ion transport and --- in renal cortical slices of ground squirrels and hamsters (Willis)(163) 506

Respiration
Stimulation of ascites tumour cell --- by low concentrations of 2-deoxyglucose (Coe) (162) 470

Respiratory adapation
Photoinhibition of --- of Saccharomyces cerevisiae (Guerin, Jacques (153) 138

Respiratory chain
Binding of antimycin to the --- (Bryla, Kaniuga)(153) 910

Respiratory chain
Composition and properties of the membrane-bound --- system of Micrococcus denitrificans (Scholes, Smith)(153) 363

Respiratory chain
Piericidin A and inhibition of --- activity in Escherichia coli K12 (Snoswell, Cox) (162) 455

Respiratory chain
Studies on the --- -linked NADH dehydrogenase. I. Effect of diethyl ether on particulate NADH dehydrogenase (Kaniuga, Gardas, Jakubiak)(153) 317

Respiratory-chain phosphorylation
Effect of deuterium oxide on --- in sub-mitochondrial particles (Muraoka, Slater) (162) 170

Respiratory components
--- of Moniezia expansa (Cestoda) (Cheah) (153) 718

Respiratory control
--- in submitochondrial particles obtained by sonication (Vallin)(162) 477

Respiratory deficiency
Induction of --- by repression of the respiratory system in a mutant of Saccharomyces cerevisiae (Negrotti, Wilkie)(153) 341

Respiratory deficiency
Oxidative phosphorylation in yeast. IV. Combination of a nuclear mutation affecting oxidative phosphorylation with cytoplasmic mutation to --- (Kováčová, Irmlerová, Kováč)(162) 157

Respiratory stimulations
Mechanism of the --- in saponine-treated leucocytes. The KCN-insensitive oxidation of NADPH (Rossi, Zatti)(153) 296

Respiratory system
Induction of respiratory deficiency by repression of the --- in a mutant of Saccharomyces cerevisiae (Negrotti, Wilkie) (153) 341

Respiratory system
Mechanism of the inhibitory effect of zinc on the oxygen-induced synthesis of the yeast --- (Ohaniance, Chaix)(170) 435

Reticulocyte
Haemoglobin synthesis during rabbit --- maturation in vitro (Schulman)(155) 253

Reticulocytes
Inhibition of haem and globin synthesis by cobalt in rabbit --- and bone marrow (Schulman, Jobe)(169) 241

Reticulocytes
Labelling in vivo of nuclear RNA and cytoplasmic RNA of pigeon --- (Barlow, Mathias)(166) 379

Reticulolyte membranes
Haemoglobin biosynthesis by preparations of --- (Kruh)(169) 511

Reticulocyte polyribosomes
Interaction between --- and isolated human haemoglobin polypeptide chains (Fischer, Nagel, Fuhr)(169) 566

Reticulocyte RNA
Action of histones of various origins on the acellular biosynthesis of haemoglobin and on --- (Kruh, Labie)(161) 518

Retina
Incorporation of D-[^{14}C]galactose and N-[^{3}H]acetylneuraminic acid into glycoprotein by particles from bovine --- (O'Brien, Muellenberg)(158) 189

Retina
Induction of glutamine synthetase in chick embryo ---: Effects of serum and steroid structure (Reif-Lehrer)(170) 263

Retina
Properties of glycosyl transfer enzymes of bovine --- (O'Brien, Muellenberg)(167) 268

Retinaldehyde
Biochemical aspects of the visual process. II. Schiff base formation in phosphatidylethanolamine monolayers upon penetration by --- (De Pont, Daemen, Bonting) (163) 204

Retinaldehyde
Biochemical aspects of the visual process. III. Specificity of the --- effect on cation movement in rod outer segments (Daemen, Bonting)(163) 212

Retinal outer segment
Permeability of isolated bovine --- fragments (Brierley et al.)(163) 117

Retinal tissue
Effect of alloxan diabetes on polyenoic fatty acid synthesis by --- (Futterman, Rollins,

- Vacano)(164) 433
- [^{14}C]Retinoic acid
  - Metabolism of --- in the retinol-deficient rat(Sundaresan, Therriault)(158) 92
- Retinol-deficient
  - Metabolism of [^{14}C] retinoic acid in the --- rat(Sundaresan, Therriault)(158) 92
- Reversed-phase chromatography
  - Versatile lipophilic Sephadex derivative for ---(Ellingboe, Nyström, Sjövall)(152) 803
- Rheumatoid factor
  - Studies on low molecular weight peptides derived from human γG-globulin. Identification of --- -reactive peptides in proteolytic digests (Henney, Jefferis, Stanworth) (154) 295
- Rhizobium
  - Interaction between colloidal montmorillonite and cells of --- species with different ionogenic surfaces(Marshall)(156) 179
- Rhodopseudomonas spheroides
  - Studies on the structure of an ornithine-containing lipid from non-sulphur --- (Gorchein)(152) 358
- Rhodopseudomonas spheroides
  - Synthesis of ATP in intact cells of Rhodospirillum rubrum and --- on oxygenation or illumination (Ramirez, Smith)(153) 466
- Rhodopsin
  - Circular dichroism of squid --- (Kito, Azuma, Maeda)(154) 352
- Rhodospirillum rubrum
  - Linkages in the cell walls of --- and its bacilliform mutants (Newton)(165) 534
- Rhodospirillum rubrum
  - Observation on the nature of pulse-labelled RNA's from photosynthetically or heterotrophically grown --- (Yamashita, Kamen)(161) 162
- Rhodospirillum rubrum
  - Optical properties of a "carotenoid complex" derived from ---(Ke et al.)(162) 467
- Rhodospirillum rubrum
  - Photochemical activities of $K_3Fe(CN)_6$-treated chromatophores from --- (Beugeling) (153) 143
- Rhodospirillum rubrum
  - Requirement of ubiquinone-10 for the ATP-forming system of chromatophores from ---(Horio et al.)(153) 913
- Rhodospirillum rubrum
  - Synthesis of ATP in intact cells of --- and Rhodopseudomonas spheroides on oxygenation or illumination (Ramirez, Smith) (153) 466
- Rhodotorula aurantiaca
  - Biosynthesis of cyclic carotenoids in Rhodotorula mucilaginosa and --- (Bonaly, Malenge)(164) 306
- Rhodotorula mucilaginosa
  - Biosynthesis of cyclic carotenoids in --- and Rhodotorula aurantiaca (Bonaly, Malenge)(164) 306
- Riboflavin
  - Cobalt inhibition of iron-catalyzed hydrogen peroxide decomposition of --- (Welkie) (158) 479
- Ribonuclease
  - Changes in --- activity in rat liver following hepatectomy(Maor, Alexander)(157) 627
- Ribonucleases
  - Effect of protein deprivation on the activity of rat liver --- and their inhibitor (Quirin-Stricker, Gross, Mandel)(159) 75
- Ribonuclease
  - Nitration of --- (Beaven, Gratzer)(168) 456
- Ribonucleases
  - Nucleases of yeast. I. Properties and variability of --- (Nakao et al.)(151) 114
- Ribonuclease
  - Polarimetric assay of the activity of --- on cyclic nucleotides (Sperling, Steinberg) (159) 408
- Ribonuclease
  - Preparation and properties of sea urchin --- (Fernlund, Josefsson)(151) 373
- Ribonuclease
  - Reaction of alloxan with thiol groups of proteins. Blockage of the reactivation of reduced --- (Younathan, Rudel)(168) 11
- Ribonuclease
  - Sequence determination of oligonucleotides obtained from pancreatic --- digest of M12 and R17 RNA's (Thirion, Kaesberg) (161) 247
- Ribonuclease
  - Specificity of pancreatic --- towards 2', 3'-cyclic phosphates derived from α-lyxofuranosyl derivatives of thymine (Holý, Sorm) (161) 264
- Ribonuclease
  - Studies on the --- activity of Proteus mirabilis(Center, Behal)(151) 698
- Ribonuclease
  - --- and trypsin treatment of ribosomes and polyribosomes from sea urchin eggs (Piatigorsky)(166) 142
- Ribonuclease activity
  - --- associated with mammalian cell walls (Stonehill, Huppert)(155) 353
- Ribonuclease activities
  - --- of the developing chick pancreas (Heller, Kulka)(167) 110
- Ribonuclease synthesis
  - Mechanism of the paradoxical stimulation of --- in Bacillus subtilis by actinomycin D (May et al.)(169) 260
- Ribonuclease A
  - Far-ultraviolet optical rotatory dispersion and circular dichroism studies of bovine pancreatic --- (Tamburro, Scatturin, Moroder)(154) 583
- Ribonuclease T_1
  - Polynucleotide analogues. XIII. Action of --- and of polynucleotide phosphorylase on various analogues (Michelson, Monny) (166) 294
- Ribonucleic acid, see RNA
- Ribonucleoprotein
  - --- interaction with mammalian monosomes(Armentrout, Weisberger)(161) 180
- Ribonucleoprotein
  - RNA synthesis in "relaxed" and "stringent" Escherichia coli. Breakdown of preformed --- particles and subsequent RNA synthesis(Dalgarno, Gros)(157) 64
- Ribonucleoprotein particles
  - Amino acid incorporation into --- prepared from rabbit mammary glands during pregnancy and lactation (Baird, Herriman) (166) 162
- Ribonucleoside metabolism
  - --- by the human erythrocyte (Bartlett, Bucolo)(156) 240
- Ribonucleoside 5'-monophosphates
  - Modified procedure for the synthesis of ^{32}P-labelled --- of high specific activity (Symons)(155) 609
- Ribosomal distribution
  - Protein synthesis and --- at different

growth stages in Bacillus stearothermophilus (González, Goldenberg, Algranati) (166) 760

Ribosomal factors
Chain initiation during polypeptide synthesis in a cell-free bacterial system programmed with plant viral messengers. I. Dependence on formylation and --- (Reinecke et al.)(157) 566

Ribosomal particles
Binding of valine transfer RNA_1 fragments to 70-S, 50-S and 30-S --- (Mirzabekov, Grünberger, Bayev)(166) 68

Ribosomal particles
Completion of --- in Escherichia coli during inhibition of protein synthesis (Dalgarno, Gros)(157) 52

Ribosomal proteins
Effects of polyamino acids, histones and heparin on amino acid incorporation into --- from rat liver (Berlinguet, Normand) (161) 509

Ribosomal proteins
Separation of the --- of Streptococcus fecalis by isoelectric focusing, amino acid composition of the total ribosomal proteins and of an acidic fraction (Brown, Baron, Abrams)(168) 386

Ribosomal proteins
Specific unmasking of --- under the influence of chelating agents and increased ionic strength (Hultin, Ostner)(160) 229

Ribosomal RNA
Apparent aggregation of 28-S --- of Zea mays (Hsiao, Segel, Tang)(157) 640

Ribosomal RNA
--- of Arbacia punctulata (Sy, McCarty) (166) 571

Ribosomal RNA
Chloroplast and cytoplasmic polysomes and --- from wheat (Mehta, Hadziyev, Zalik) (169) 381

Ribosomal RNA
Difference in binding of 2-acetylaminofluorene to rat liver DNA and --- (Kriek) (161) 273

Ribosomal RNA
Evidence for two types of 18-S --- in Neurospora crassa (Michelson, Suyama)(157) 200

Ribosomal RNA
Genetic similarity between the --- from spores and vegetative cells of Bacillus subtilis (Bishop, Doi)(169) 278

Ribosomal RNA
Investigation of the --- sites in yeast DNA by the hybridization technique (Retèl, Planta)(169) 416

Ribosomal RNA
Isolation of DNA and --- from rat liver (Irving, Veazey)(166) 246

Ribosomal RNA
Kinetic aspects of --- and messenger RNA formation in young rat brain (Murthy) (166) 115

Ribosomal DNA
Localization of amplified --- in the oocyte of Xenopus laevis (Evans, Birnstiel) (166) 274

Ribosomal RNA
Methylation of --- precursor and tRNA in rat liver (Muramatsu, Fujisawa)(157) 476

Ribosomal RNA
Production of --- from high molecular weight precursors. I. Factors which influence the ability of isolated nucleoli to process 45-S RNA (Liau, Craig, Perry)(169) 196

Ribosomal RNA
Properties of --- obtained from a bleached Euglena gracilis (Portier, Nigon)(169) 540

Ribosomal RNA
RNA–DNA hybrids formed by --- from a rat hepatoma (Brimacombe, Kirby)(157) 362

Ribosomal RNA
Selective inhibition of --- synthesis in mammalian cells (Tavitian, Uretsky, Acs) (157) 33

Ribosomal RNA
Studies on microbial RNA. V. A comparison of in vivo methylated components of --- from Escherichia coli and Saccharomyces cerevisiae (Isaksson, Phillips)(155) 63

Ribosomal RNA
Studies on tissue specificities of nuclear and --- using the DNA x RNA hybridization technique (Bielka, Junghahn)(166) 698

Ribosomal RNA
Studies of wheat-embryo ---. I. Behaviour on methylated albumin kieselguhr columns (Singh, Keller)(169) 150

Ribosomal structure
Use of proteinase in the study of --- (Ostner, Hultin)(154) 376

Ribosomal subunits
--- of Landschütz ascites cells during changes in polysome distribution (Hogan, Korner)(169) 129

Ribosomal subunits
Precursors of --- in Tetrahymena pyriformis (Leick, Plesner)(169) 409

Ribosomal subunits
Role of --- and 80-S monomers in polysome formation in ascites tumour cell (Hogan, Korner)(169) 139

Ribosomes
Altered --- in spiramycin-resistant mutants of Bacillus subtilis (Ahmed)(166) 218

Ribosomes
Binding of aminoacyl-tRNA to complexes of Escherichia coli --- and plant viral RNA (Verhoef, Kraal, Bosch)(155) 456

Ribosome
--- changes following illumination of dark-grown plants (Williams, Novelli)(155) 183

Ribosomes
Characterization of --- of Tetrahymena pyriformis (Weller, Raina, Johnstone) (157) 558

Ribsomes
Circular dichroism of Escherichia coli --- and tobacco mosaic virus (Miall, Walker) (166) 711

Ribosomes
Concurrent changes in the concentration of monomeric --- and the rate of ribosome synthesis in rat liver (Rizzo, Webb)(169) 163

Ribosomes
Cross resistance of Escherichia coli B --- to inhibition of the puromycin reaction by erythromycin, spiramycin and chloramphenicol (Cerná, Rychlík)(157) 436

Ribosome
Distribution of radioactivity between the acid-soluble pool and the pools of RNA in the nuclear, non-sedimentable and --- fractions of rat liver after a single injection of labelled orotic acid (Blobel, Potter)(166) 48

Ribosomes
Distribution of RNA and --- in reticulocytes (Burka)(166) 672

Ribosomes

Effect of γ-irradiation on Escherichia coli ---: Reversible dissociation (Tamaoki et al.) (157) 655
Ribosomes
Effect of polyamines on the enzymatic degradation of --- (Erdmann et al.)(157) 43
Ribosomes
Formation of --- in Tetrahymena pyriformis (Leick, Plesner)(169) 398
Ribosomes
Interaction between plant viral RNA and Escherichia coli --- (Van Duin et al.) (155) 444
Ribosomes
In vitro amino acid incorporating system for liver, brain and skeletal muscle --- (Cooper, Muramatsu, Wannemacher Jr.) (169) 269
Ribosomes
Isolation and identification of 3', 5'-terminal hydroxy phosphorylated dinucleotide in the autodegradation products of rat liver --- (Goto, Mizuno)(166) 663
Ribosomes
Non-competitive binding of rapidly labelled nuclear RNA by --- (Naora, Kodaira) (161) 276
Ribosomes
Non-identity of the site of action of erythromycin A and chloramphenicol on Bacillus subtilis --- (Oleinick, Wilhelm, Corcoran)(155) 290
Ribosomes
Polyamine–inorganic cation interaction with --- of Escherichia coli (Norton, Erdmann, Herbst)(155) 293
Ribosomes
Polyribosomes in Azotobacter vinelandii. I. Isolation, characterization and distribution of ---, polyribosomes and subunits in logarithmically growing Azotobacter (Oppenheim et al.)(161) 386
Ribosomes
Properties of --- from eggs of Ascaris at different stages of development (Grummt, Bielka)(161) 253
Ribosomes
Protein composition of --- and ribosomal subunits from animal tissues. Electrophoretic studies (Di Girolamo, Cammarano) (168) 181
Ribosomes
Protein constituents of plant --- (Lyttleton) (154) 145
Ribosomes
Protein synthetic activities of mycobacterial --- in vivo (Fukuyama, Tani)(155) 611
Ribosomes
Purification of nucleoside triphosphatases from pea seedling --- (Matsushita, Raacke) (166) 707
Ribosomes
Recognition of viral RNA by mammalian ---. An effect of interferon (Carter, Levy) (155) 437
Ribosomes
Reversible dissociation of Escherichia coli --- by hydrogen peroxide (Nakamura, Tamaoki)(161) 368
Ribosomes
Reversible dissociation of Escherichia coli --- by nitrogen mustard (Miyazawa, Dick, Tamaoki)(155) 193
Ribosomes
Ribonuclease and trypsin treatment of --- and polyribosomes from sea urchin eggs (Piatigorsky)(166) 142
Ribosomes
RNA turnover in free and endoplasmic reticulum-bound --- from rat liver (Murty, Hallinan)(157) 414
Ribosomes
Selective deproteinization of --- by sodium dodecyl sulphate (Stutz, Rawson)(161) 564
Ribosomes
Selective loss of binding of aminoacyl-tRNA by --- treated with diethanoldisulphide (Furano)(161) 255
Ribosome
Stimulation of RNA synthesis by --- inhibitors in amino acid-starved Escherichia coli (Ezekiel, Elkins)(166) 466
Ribosomes
Studies on the --- from the cellular slime molds, Dictyostelium discoideum and Dictyostelium purpureum (Ceccarini, Maggio) (166) 134
Ribosomes
Studies on the --- and RNA's of Aerobacter aerogenes grown at different rates in car bon-limited continuous culture (Sykes, Young)(169) 103
Ribosomes
Studies on the --- and RNA's of Aerobacter aerogenes grown at different rates in magnesium-limited continuous culture (Young, Sykes)(169) 117
Ribosomes
Translational characteristics of --- and coding properties of transfer RNA in the mutant of Bacterium paracoli with the increased GC content of DNA (Gause, Grünberger)(166) 538
Ribosomes
Ultraviolet inactivation of Escherichia coli ---. II. Effects of messenger RNA binding on ultraviolet sensitivity of ribosomes (Tokimatsu et al.)(169) 363
Ribosome precursors
Localization of --- in Escherichia coli (Di Girolamo, Hinckley, Busiello)(169) 387
Ribosome structure
Role of Zn^{2+} and Ni^{2+} in --- (Tal)(169) 564
Ribosome synthesis
Concurrent changes in the concentration of monomeric ribosomes and the rate of --- in rat liver (Rizzo, Webb)(169) 163
Ribulosediphosphate carboxylase
Effect of Mg^{2+} concentration on the pH optimum and Michaelis constants of the spinach chloroplast --- (carboxydismutase) (Bassham, Sharp, Morris)(153) 898
Rifamycins
Action of --- on RNA polymerase (Wehrli et al.)(157) 215
Rifamycin
Inhibition of bacterial RNA synthesis by the --- antibiotics (Wilhelm, Oleinick, Corcoran)(166) 268
Rifamycins
Mode of action of --- on the RNA polymerase reaction (Sippel, Hartmann)(157) 218
RNA
Action of acetic anhydride upon yeast --- 's in dimethylformamide (Keith, Ebel)(166) 16
RNA
Action of histones of various origins on the acellular biosynthesis of haemoglobin and on reticulocyte --- (Kruh, Labie)(161) 518
RNA

Aldosterone-induced --- synthesis in the adrenalectomized rat kidney (Forte, Landon)(157) 303

RNA
Apparent aggregation of 28-S ribosomal --- of Zea mays (Hsiao, Segel, Tang)(157) 640

RNA
--- associated with the outer membrane of rat liver nuclei (Whittle, Bushnell, Potter) (161) 41

RNA
Base complementarity between rapidly labelled --- in Escherichia coli B infected with ultraviolet-irradiated T2 phages and T2-DNA (Yamada, Nozu)(169) 67

RNA
Bias of the distribution of the 2'-O-methylribonucleotide constituents of yeast transfer --- (Morisawa, Chargaff)(169) 285

RNA
Binding of aminoacyl-tRNA to complexes of Escherichia coli ribosomes and plant viral --- (Verhoef, Kraal, Bosch)(155) 456

RNA$_1$
Binding of valine transfer --- fragments to 70-S, 50-S and 30-S ribosomal particles (Mirazabekov, Grünberger, Bayev)(166) 68

16-S RNA
Characterization of $N^4,O^{2'}$-dimethylcytidine, a rare nucleoside constituent of Escherichia coli --- (Nichols, Lane)(166) 605

RNA
Characterization of messenger --- in protoplasts of Saccharomyces carlsbergensis (Hartlief, Koningsberger)(166) 512

RNA
Characterisation of --- from the smooth endoplasmic reticulum of rat liver (King, Fitschen)(155) 32

RNA
Chemical fractionation of microsomes and metabolic activity of membrane --- from rat liver (Tulegenova, Rodionova, Shapot) (166) 265

RNA
Chemical synthesis of glycylglycyl $[^{14}C]$phenylalanyl transfer --- and glycylglycylglycyl $[^{14}C]$ phenylalanyl transfer RNA (Lapidot et al.)(157) 433

RNA
Chloroplast and cytoplasmic polysomes and ribosomal --- from wheat (Mehta, Hadziyev, Zalik)(169) 381

RNA
Comparison of the rates of --- and protein synthesis in Escherichia coli cells partially starved for different amino acids (Ezekiel, Blumenthal)(161) 494

RNA
Counter-current distribution of --- from rat liver: Effect of growth hormone, thyroxine, and hydrocortisone on distribution patterns (Jackson, Sells)(155) 417

RNA
Cupric ion catalysis in hydrolysis of aminoacyl transfer --- (Schofield, Zamecnik) (155) 410

RNA
Depolymerization of --- by plumbous ion (Farkas)(155) 401

RNA
Difference in binding of 2-acetylaminofluorene to rat liver DNA and ribosomal --- (Kriek)(161) 273

RNA
Different anticodons in purified valine transfer --- fractions from yeast (Mirzabekov et al.)(166) 75

RNA
Distribution of radioactivity between the acid-soluble pool and the pools of --- in the nuclear, non-sedimentable and ribosome fractions of rat liver after a single injection of labelled orotic acid (Blobel, Potter) (166) 48

RNA
Effect of carbohydrate on δ-aminolaevulinate synthetase: The role of --- (Hickman et al.)(161) 197

RNA
Effects of cycloheximide and 5-fluorouracil on the synthesis of --- in yeast (Mayo, Andrean, De Kloet)(169) 297

RNA
Effect of --- on the infectivity of phage DNA (Bailey, Fry)(166) 726

RNA
Effect of olivomycin and echinomycin on initiation and growth of --- chains catalyzed by RNA polymerase (Gause, Loshkareva, Zbarsky)(166) 752

RNA
Effect of parathyroid hormone in vivo on the labelling of nuclear --- from the intestinal mucosa and liver of vitamin D-deficient and normal chicks (Hamilton, Detert, Cohn)(155) 311

RNA
Effect of 5'-terminal phosphate on the recognition of some dinucleoside phosphates by $[^{14}C]$aminoacyl transfer --- (Grünberger, Holý, Sorm)(157) 439

RNA
Effect of T_4 infection on messenger --- synthesis in Escherichia coli (Rouvière et al.) (166) 94

RNA
Effect of 1,1,1-trichloro-2,2-bis-(p-chlorophenyl)ethane on --- metabolism in Musca domestica L. (Balazs, Agosin)(157) 1

RNA
Evidence for two types of 18-S ribosomal --- in Neurospora crassa (Michelson, Suyama) (157) 200

RNA
Extent and specificity of the degradation of polunucleotide chain under the conditions of the preparation of deuridylic --- (Budowsky, Simukova, Guskova)(166) 755

RNA
--- fraction in normal rat liver and Morris 5123D hepatoma (Mizuno, Hof, Collin) (166) 656

RNA
Fractionation and biosynthesis of --- of the rat adrenals (Boyadjiev, Hadjiolov) (161) 341

RNA
Fractionation of Escherichia coli transfer --- on benzoylated DEAE-cellulose (Roy, Söll)(161) 572

RNA
Fractionation of serine transfer --- from Escherichia coli and their coding properties (Ishikura, Nishimura)(155) 72

RNA
Genetic similarity between the ribosomal --- from spores and vegetative cells of Bacillus subtilis (Bishop, Doi)(169) 278

RNA

Increase during lactation of --- synthesis by isolated liver nuclei (Leake, Mayne, Barry)(157) 198

RNA
Influence of cycloheximide (actidione) upon pyrimidine nucleotide metabolism and --- synthesis in cocklebur leaf discs (Ross)(166) 40

RNA
Inhibition of acceptor activity of transfer --- by specific antibodies against transfer RNA (Pulkrábek, Raška Jr., Rychlik) (157) 652

RNA
Inhibition of bacterial --- synthesis by the rifamycin antibiotics (Wilhelm, Oleinick, Corcoran)(166) 268

RNA
Inhibition of myxovirus by modified --- (Louisot et al.)(155) 38

RNA
Inhibition of protein synthesis by an --- fraction from myeloblastosis virus (Olson, Deeney, Beaudreau)(161) 532

RNA
Inhibitory effects of hydrocortisone upon the phytohaemagglutinin-induced --- synthesis in human lymphocytes (Ono et al.) (161) 361

RNA
Integrity of the terminal pCpCpA sequence of transfer --- extracted from yeasts in different growth states (Giege, Ebel)(161) 125

RNA
Interaction between plant viral --- and Escherichia coli ribosomes (Van Duin et al.) (155) 444

RNA
Investigation of the ribosomal --- sites in yeast DNA by the hybridization technique (Retél, Planta)(169) 416

RNA
Isolation and characterization of a rapidly labelled --- from mouse liver mitochondria (Comorosan, Gaspar, Sandru)(166) 394

RNA
Isolation of DNA and ribosomal --- from rat liver (Irving, Veazey)(166) 246

RNA
Isolation and properties of undermethylated phenylalanine transfer --- from a relaxed mutant of Escherichia coli (Shugart, Novelli, Stulberg)(157) 83

RNA
Kinetic aspects of ribosomal RNA and messenger --- in young rat brain (Murthy) (166) 115

RNA
Labelling in vivo of nuclear --- and cytoplasmic --- of pigeon reticulocytes (Barlow, Mathias)(166) 379

RNA
Low molecular weight --- of the chromatin fraction from Novikoff hepatoma and rat liver nuclei (Prestayko, Busch)(169) 327

RNA
Methylation of --- by mouse organs and tumors: Ionic stimulation in vitro (Kaye, Leboy)(157) 289

RNA
Methylation of ribosomal --- precursor and transfer --- in rat liver (Muramatsu, Fujisawa)(157) 476

RNA
Modification of nucleosides and nucleotides. VII. Selective cyanoethylation of inosine and pseudouridine in yeast transfer --- (Yoshida, Ukita)(157) 455

RNA
Modification of nucleosides and nucleotides. VIII. The reaction rates of pseudouridine residues with acrylonitrile and its relation to the secondary structure of transfer --- (Yoshida, Ukita)(157) 466

RNA
Molecular mechanisms of liver regeneration. VI. Incorporation of [^{14}C]orotic acid into cytoplasmic --- in normal and regenerating liver (Fausto, Van Lancker)(161) 32

RNA
Nature of DNA-associated --- in Chlorella cells (Beiderbeck, Richter)(157) 658

RNA
Non-competitive binding of rapidly labelled nuclear --- by ribosomes (Naora, Kodaira)(161) 276

RNA
Nucleotide sequences at the 5'-linked ends of viral --- (Glitz, Bradley, Fraenkel-Conrat) (161) 1

RNA
Observation on the nature of pulse-labelled --- from photosynthetically or heterotrophically grown Rhodospirillum rubrum (Yamashita, Kamen)(161) 162

RNA
Occurrence of light particles carrying DNA-like --- in the microsomal fraction of adult rat brain (Samec, Jacob, Mandel) (161) 377

RNA
Preparation of transfer --- from Escherichia coli (Gutcho)(157) 76

RNA
Presence of AMP-rich --- in counter-current distribution and column chromatography fractions of pea root nucleic acids (Ewing, Cherry)(161) 331

RNA
Production of ribosomal --- from high molecular weight precursors. I. Factors which influence the ability of isolated nucleoli to process 45-S RNA (Liau, Craig, Perry) (169) 196

RNA
Properties of ribosomal --- obtained from a bleached Euglena gracilis (Portier, Nigon) (169) 540

RNA
Radiolysis of 4-thiouracil and of the 4-thiouracil moieties of 4-thiouridine and transfer --- from Escherichia coli in aqueous solutions (Sörbo, Lundberg)(157) 445

RNA
Recognition of viral --- by mammalian ribosomes. An effect of interferon (Carter, Levy)(155) 437

RNA
Ribosomal --- of Arbacia punctulata (Sy, McCarty)(166) 571

RNA
RNA-DNA hybrids formed by ribosomal --- from a rat hepatoma (Brimacombe, Kirby)(157) 362

RNA
Sedimentation of rapidly labelled --- from rat liver in different gradients (Hastings et al.)(155) 603

RNA
Sedimentation studies on --- from proplas-

tids of Zea mays (Jacobson, Williams) (169) 7
RNA
Selective inhibition of ribosomal --- synthesis in mammalian cells (Tavitian, Uretsky, Acs)(157) 33
RNA
Selective loss of binding of aminoacyl transfer --- by ribosomes treated with diethanoldisulphide (Furano)(161) 255
RNA
Selective suppression of nucleolar --- metabolism in the absence of protein synthesis (Higashi et al.)(166) 388
RNA
Sequence determination of oligonucleotides obtained from pancreatic ribonuclease digests of M12 and R17 --- (Thirion, Kaesberg)(161) 247
RNA
Site of foot-and-mouth disease virus --- synthesis and some properties of its double-stranded --- (Arlinghans, Bachrach, Polatnick)(161) 170
RNA
Specific hybridization of amino acid-specific transfer --- to DNA in Escherichia coli (Seno, Nishimura)(157) 97
RNA
Stability of peptidyl transfer ---. The intermediate of protein synthesis (Bresler et al.) (155) 465
RNA
Stimulation by aldosterone of a rapidly labelled --- fraction in toad bladder tissue (Rousseau, Crabbé)(157) 25
RNA
Stimulation of --- synthesis by ribosome inhibitors in amino acid-starved Escherichia coli (Ezekiel, Elkins)(166) 466
RNA
Studies on messenger --- from peanut plants: In vitro polyribosome formation and protein synthesis (Jachymczyk, Cherry)(157) 368
RNA
Studies on the ribosomes and --- of Aerobacter aerogenes grown at different rates in carbon-limited continuous culture (Sykes, Young)(169) 103
RNA
Studies on the ribosomes and --- of Aerobacter aerogenes grown at different rates in magnesium-limited continuous culture (Young, Sykes)(169) 117
RNA
Studies on the sedimentation properties of nuclear, nucleolar and extranucleolar nuclear --- (Fujisawa, Muramatsu)(169) 175
RNA
Studies on the size of the messenger --- transcribed from the histidine operon during simultaneous and sequential depression (Venetianer et al.)(166) 124
RNA
Studies on --- synthesized in vitro (Darlix, Sentenac, Fromageot)(166) 438
RNA
Studies on wheat-embryo ribosomal --- I. Behaviour on methylated albumin kieselguhr columns (Singh, Keller)(169) 150
RNA
Sucrose density-gradient analysis of Euglena gracilis --- isolated with Macaloid (Schuit, Buetlow)(166) 702
RNA
Synthesis of DNA-like --- in synchronized cultures of mammalian cells (Bello)(157) 8
RNA
--- synthesis in "relaxed" and "stringent" Escherichia coli. Breakdown of preformed ribonucleoprotein particles and subsequent --- synthesis (Dalgarno, Gros) (157) 64
RNA
Temperature-induced lesion in amino acid transfer --- attachment in a psychrophile (Malcolm)(157) 493
RNA
Template capabilities and size distribution of echinoid --- during early development (Slater, Spiegelman)(166) 82
RNA
5'-Terminal end group of the --- of the bacteriophage MS2 (De Wachter, Verhassel, Fiers)(157) 195
RNA
Transcription of the tryptophan operation of Escherichia coli in vitro. I. Detection and quantitative determination of specific --- (Yura et al.)(169) 494
RNA
Translational characteristics of ribosomes and coding properties of transfer --- in the mutant of Bacterium paracoli with the increased GC content of DNA (Gause, Grünberger)(166) 538
RNA
--- turnover in free and endoplasmic reticulum-bound ribosomes from rat liver (Murty, Hallinan)(157) 414
RNA
Ultraviolet inactivation of amino acid acceptance of transfer --- (Wade et al.) (161) 469
RNA
Ultraviolet inactivation of Escherichia coli ribosomes. II. Effects of messenger --- binding on ultraviolet sensitivity of ribosomes (Tokimatsu et al.)(169) 363
RNA biosynthesis
--- and polyadenylic acid biosynthesis in tobacco leaf homogenates (Sachar)(169) 58
RNA chromatography
Use of DEAE-cellulose for the high molecular weight --- (Parish)(169) 14
RNA formation
Stimulation of --- and phospholipid formation by long-acting thyroid stimulator and by thyroid-stimulating hormone (Ochi, DeGroot)(170) 198
RNA nucleotidyltransferase
Influence of spermidine on the reaction of --- (Petersen, Kröger, Hagen)(161) 325
RNA polymerase
Action of rifamycins on --- (Wehrli et al.) (157) 215
RNA polymerase
--- activity of the chick oviduct during steroid-induced synthesis of a specific protein (McGuire, O'Malley)(157) 187
RNA polymerase
--- activity following infection with murine leukemia virus (Lin, Rich)(157) 310
RNA polymerase
Aspects of polymerization catalyzed by --- from Pseudomonas indigofera (Tani et al.) (161) 309
RNA polymerase
Azotobacter vinelandii ---. V. Unprimed

  - synthesis of polyadenylic acid-polyuridylic acid (Krakow)(166) 459
- RNA polymerase
  - Differential responses of DNA polymerase and --- to modifications of the template rat liver DNA caused by action of the carcinogen acetylaminofluorene in vivo and in vitro (Troll et al.)(157) 16
- RNA polymerase
  - Effect of olivomycin and echinomycin on initiation and growth of RNA chains catalyzed by --- (Gause, Loshkareva, Zbarsky) (166) 752
- RNA polymerase
  - Enhancement by 2,4-dichlorophenoxyacetic acid of chromatin --- in soybean hypocotyl tissue (O'Brien et al.)(169) 35
- RNA polymerase
  - Influence of ionic strength and a polyanion transcription in vitro I. Stimulation of the aggregate --- from rat liver nuclei (Chambon et al.)(157) 504
- RNA polymerase
  - Influence of ionic strength and a polyanion on transcription in vitro. II. Effects on the template efficiency of rat liver chromatin for a purified bacterial --- (Chambon et al.)(157) 520
- RNA polymerase
  - Inhibition of DNA-dependent --- by the exotoxin of Bacillus thuringiensis var. gelechiae (Sebesta, Horská)(169) 281
- RNA polymerase
  - Inhibition of DNA-dependent --- reaction of Escherichia coli by an antimicrobial antibiotic, streptovaricin (Mizuno et al.) (157) 322
- RNA polymerase
  - Initiation of chains by --- and the effects of inhibitors studied by a direct filtration technique (Sentenac, Simon, Fromageot) (161) 299
- RNA polymerase
  - Mode of action of rifamycin on the --- reaction (Sippel, Hartmann)(157) 218
- RNA polymerase
  - Presence of two --- activities in liver nucleoli (Jacob, Sajdel, Munro)(157) 421
- RNA polymerase
  - Properties of RNA synthesis in HeLa nuclei by Micrococcus lysodeikticus or endogenous --- (Summers, Mueller)(169) 316
- RNA polymerase
  - Role of estrogens in the regulation of --- in surviving rat uteri (Nicolette, LeMahieu, Mueller)(166) 403
- RNA polymerase
  - Studies of muscle development. IV. Some characteristics of --- activity in isolated nuclei from developing chick muscle (Marchok, Wolff)(155) 378
- RNA polymerase
  - Synthesis of formycin triphosphate and its incorporation into ribopolynucleotide by DNA-dependent --- (Ikehara et al.)(155) 82
- RNA synthesis
  - Aldosterone-induced --- in the adrenalectomized rat kidney (Forte, Landon) (157) 303
- RNA synthesis
  - Effects of aflatoxin B_1 on polysomal profiles and --- in rat liver (Roy)(169) 206
- RNA synthesis
  - Effect of T_4 infection on messenger --- in Escherichia coli (Rouvière et al.)(166) 94
- RNA synthesis
  - Increase during lactation of --- by isolated liver nuclei (Leake, Mayne, Barry)(157) 198
- RNA synthesis
  - Influence of cycloheximide (actidione) upon pyrimidine nucleotide metabolism and --- in cocklebur leaf discs (Ross) (166) 40
- RNA synthesis
  - Inhibition of bacterial --- by the rifamycin antibiotics (Wilhelm, Oleinick, Corcoran) (166) 268
- RNA synthesis
  - Inhibitory effects of hydrorocortisone upon the phytohaemagglutinin-induced --- in human lymphocytes (Ono et al.)(161) 361
- RNA synthesis
  - Kinetics of --- in Acetabularia (Dillard, Schweiger)(169) 561
- RNA synthesis
  - --- by mammalian cells treated with the aminonucleoside of puromycin (Taylor, Stanners)(155) 424
- RNA synthesis
  - --- in the nucleoli of mouse ascites tumour cells in relation to nucleolar components (Izawa, Kawashima)(155) 51
- RNA synthesis
  - --- in penicillin spheroplasts of Escherichia coli (Ehrenfeld, Koch)(169) 44
- RNA synthesis
  - Properties of --- in HeLa nuclei by Micrococcus lysodeikticus or endogenous RNA polymerase (Summers, Mueller)(169) 316
- RNA synthesis
  - Rate of --- in haploid and diploid embryos of loach (Misgurnus fossilis) (Kafiani et al.) (169) 274
- RNA synthesis
  - --- in "relaxed" and "stringent" Escherichia coli. Breakdown of preformed ribonucleoprotein particles and subsequent RNA synthesis (Dalgarno, Gros)(157) 64
- RNA synthesis
  - --- in rooster liver (Coolsma, Gruber) (169) 306
- RNA synthesis
  - Stimulation of --- by ribosome inhibitors in amino acid-starved Escherichia coli (Ezekiel, Elkins)(166) 466
- RNA synthesis
  - System in vitro for the --- and protein synthesis by isolated salivary glands and by nuclei from Chironomus larvae (Ristow, Arends)(157) 178
- RNA turnover
  - --- in free and endoplasmic reticulum-bound ribosomes from rat liver (Murty, Hallinan)(157) 414
- Robinia pseudoaccacia
  - Purification and physicochemical properties of a phytohaemagglutinin from --- Isolation of an active glycopeptide (Bourrillon, Font)(154) 28
- Rubidium transport
  - Lens as an osmometer and the effects of medium osmolarity on water transport, ^{86}Rb efflux and --- by the lens (Cotlier, Kwan, Beaty)(150) 705
- Rubidium uptake
  - Studies on (Na^+-K^+)-activated ATPase. XXI. Changes in (Na^+-K^+)-activated ATPase activity and ouabain-sensitive --- rate in regenerating rat liver (Bakkeren, Bonting) (150) 467

Rules
    Tentative ---. Abbreviated nomenclature of synthetic polypeptides (polymerized amino acids)(IUPAC-IUB Commission on Biochemical Nomenclature)(168) 1
Rules
    Tentative nomenclature ---. A one-letter notation for amino acid sequences (IUPAC-IUB Commission on Biochemical Nomenclature)(168) 6
Rumen microorganisms
    Function of growth factors for ---. II. Metabolic fate of incorporated fatty acids in Selenomonas ruminantium (Kanegasaki, Takahashi)(152) 40

S

Saccharomyces carlsbergensis
Effects of myo-inositol deficiency upon the lipid composition of the yeast, --- (Shafai, Lewin)(152) 787
Saccharomyces cerevisiae
Induction of respiratory deficiency by repression of the respiratory system in a mutant of --- (Negrotti, Wilkie)(153) 341
Saccharomyces cerevisiae
Presence and regulation of the synthesis of two alcohol dehydrogenases from --- (Schimpfessel)(151) 317
Saccharomyces cerevisiae
Properties of --- mitochondria prepared by a mechanical method (Balcavage, Mattoon) (153) 521
Saccharomyces cerevisiae
Role of sterols in --- (Proudlock et al.) (152) 434
Saccharomyces cerevisiae
Studies on microbial RNA. V. A comparison of the in vivo methylated components of ribosomal RNA from Escherichia coli and --- (Isaksson, Phillips)(155) 63
Saccharomyces cerevisiae
Studies on --- sulphite reductase. I. Purification and characterization (Yoshimoto, Sato)(153) 555
Saccharomyces cerevisiae
Studies on --- sulphite reductase. II. Partial purification and properties of genetically incomplete sulphite reductases (Yoshimoto, Sato)(153) 576
Saccharomyces fragilis
Specificity of UDP-glucose 4-epimerase from the yeast --- (Salo et al.)(151) 484
Saccharopine
Conversion of lysine to --- by human tissues (Hutzler, Dancis)(158) 62
Salicylanilides
Photosynthetic phosphorylation and associated reactions in the presence of a new group of uncouplers: --- (Black Jr.)(162) 294
Salmonella typhimurium
Complementation in vitro between cysteine auxotrophs of --- (Henderson, Loughlin) (156) 195
Salmonella typhimurium
Rhizobium-synthesized phytotoxin: An inhibitor of β-cystathionase in --- (Owens, Guggenheim, Hilton)(158) 219
Salt-gland
Relation of the oxidoreduction level of electron carriers to ion transport in slices of avian --- (Van Rossum)(153) 124
Saponine
Mechanism of the respiratory stimulations in --- -treated leucocytes. The KCN-insensitive oxidation of NADPH (Rossi, Zatti) (153) 296
Saprospira thermalis
Purification and characterization of the fructose diphosphate aldolase from Anacystis nidulans and --- (Willard, Gibbs) (151) 438
Sarcina lutea
Mode of action of neocarzinostatin: Requirement of protein synthesis for neocarzinostatin-mediated DNA degradation in --- (Ono et al.)(155) 616
Sarcoplasmic reticulum
---. V. The structure of sarcoplasmic reticulum membranes (Martonosi)(150) 694
Sarcosomes
Nature of malonate-insensitive pyruvate oxidation and glutamate oxidation by heart --- (Davis)(162) 1
Sarcotubular vesicles
Molecular size of the calcium-transport ATPase of --- estimated from radiation inactivation (Vegh et al.)(163) 266
Satellite DNA
Intracellular localization and hybridization studies of a human --- (Giacomoni, Corneo)(166) 586
Satellite DNA
Studies on the intranuclear distribution and properties of mouse --- (Schildkraut, Maio)(161) 76
Saturated fatty acids
Influence of chain length on the dehydrogenation of --- (Howling, Moris, James) (152) 224
Scenedesmus
520-nm light-induced absorbance change in photosynthetic mutants of --- (Pratt, Bishop)(162) 369
Scenedesmus obliquus
Chloroplast reactions of photosynthetic mutants of --- (Pratt, Bishop)(153) 664
Schizosaccharomyces
Occurrence of α(1-3)glucan in Cryptococcus --- and Polyporus species, and its hydrolysis by a Streptomyces culture filtrate lysing cell walls of Cryptococcus (Bacon et al.)(158) 313
Sea urchin
Elastic mathematical theory of cells and mitochondria in swelling process. VI. Ultrastucture of membrane region in the egg cell of the --- (Strongylocentrotus purpuratus) in subelastic and elastic swelling (Mela)(150) 553
Secondary structure
Binding of proflavine to transfer RNA: Dependence on --- (Grosjean, Wérenne, Chantrenne)(166) 616
D-Sedoheptulose
Enzymatic phosphorylation of --- with animal liver (Iwai, Kiyomoto, Takeshita) (167) 302
Seeds
Protein subunits in dormant and germinating soybean --- (Catsimpoolas et al.) (168) 122
Selenomonas ruminantium
Function of growth factors for rumen microorganisms. II. Metabolic fate of incorporated fatty acids in --- (Kanegasaki, Takahashi)(152) 40
Semihaemoglobin β
Preparation of a new haemoglobin partially saturated with haem: --- (Cassoly) (168) 370
Semiquinone radical
Electron paramagnetic resonance obser-

  - vations on biogenic --- and 5-methyl phenazinium radical (Ishizu et al.)(165) 283
- Senescence
  - Acceleration of --- and of the increase of chromatin-associated nucleases in excised barley leaves by abscisin II and its reversal by kinetin (Srivastava)(169) 534
- Sephadex
  - Versatile lipophilic --- derivative for "reversed-phase" chromatography (Ellingboe, Nyström, Sjövall)(152) 803
- D-Serine
  - Major attachement site for --- in the cell wall mucopeptide of Micrococcus lysodeikticus (Whitney, Grula)(158) 124
- Serine dehydratase
  - --- activity in livers of phlorrhizin-treated rats and the hepatic serine plus threonine concentration (Bojanowska, Williamson) (159) 560
- Serine dehydratase
  - Regulatory effects of glucocorticoids on ornithine aminotransferase and --- in rat liver (Peraino)(165) 108
- D-Serine ethanolamine phosphate
  - Biosynthesis of --- in the earthworm Megascolides cameroni (Allen, Rosenberg) (152) 208
- Serine ethanolamine phosphate synthetase
  - Mechanism of action and some properties of --- (Allen, Rosenberg)(151) 504
- Serine hydroxymethylase
  - Studies on --- isoenzymes from rat liver (Nakano, Fujioka, Wada)(159) 19
- Serine metabolism
  - Comparative studies of enzymes related to --- in fetal and adult liver (Cheung, Cotropia, Sallach)(170) 334
- Serine transfer RNA
  - Fractionation of --- from Escherichia coli and their coding properties (Ishikura, Nishimura)(155) 72
- Serum albumin, see albumin
- O-Seryl-N-acetylgalactosaminide glycohydrolase
  - Studies on glycoproteins. XVII. Purification of ---. Its complete separation from N-acetyl-β-D-hexosaminidase and proteinases (Schauer, Gottschalk)(156) 304
- Shigella dysenteriae
  - Polyriboadenylate polymerase and its inhibition in T_4-infected Escherichia coli and --- (Colvill, Terzi)(155) 394
- Shikimic acid
  - Biosynthesis of phenols. XV. Isolation of some --- -derived metabolites from mutant strains of Streptomyces rimosus unable to produce oxytetracycline (Catlin, Hassall, Pratt)(156) 109
- Short-chain fatty acid
  - --- activation in rat liver. A new assay procedure for the enzymes and studies on their intracellular localization (Aas, Bremer)(164) 157
- Short-chain fatty acids
  - Fatty acid synthesis in mitochondria. Elongation of --- and formation of unsaturated long-chain fatty acids (Christ)(152) 50
- Short-circuit current
  - Effect of a lipid extract of frog skin on --- and sodium transport of isolated frog skin (McAfee, Locke)(150) 131
- Sialic acid
  - --- contents and controls of normal and malignant cells (Ohta et al.)(158) 98
- Sialic acids
  - Distribution of --- and other carbohydrates in skin of intact and hypophysectomized rats (Herp, Pigman)(165) 76
- Sialic acids
  - --- of horse serum with special reference to their virus inhibitory properties (Pepper) (156) 317
- Single living cell
  - Kinetics of the fluorescence response to microelectrophoretical introduction of metabolites in the --- (Kohen et al.)(158) 185
- Siolipin A
  - ---: New lipoamino acid ester isolated from Streptomyces sioyaensis (Kawanami, Kimura, Otsuka)(152) 808
- Skin excitation
  - Na^+ and Ca^{2+} dependence of threshold potential in frog --- (Lindemann)(163) 424
- Small intestine
  - Absorption of bile salt and fatty acid by hamster --- (Gordon, Kern Jr.)(152) 372
- Small intestine
  - Amino acid transport by the --- of the rat. Evidence against interactions between sugars and amino acids at the carrier level (Munck)(156) 192
- Small intestine
  - Studies on the quantitative distribution of bile salts along the rat --- under varying dietary regimes (Boyd, Eastwood)(152) 159
- Sodium
  - Differential effect of --- and potassium on calcium adsorption to stearic acid monolayers (Yamauchi et al.)(150) 181
- Sodium
  - Effects of ATP and --- on a K^+-activated phosphatase from erythrocyte cell membranes (Rega, Garrahan, Pouchan) (150) 742
- Sodium
  - Stimulatory effect of --- and ATP on the release of acetylcholine from synaptic vesicles (Matsuda, Hata, Yoshida)(150) 739
- Sodium azide
  - Effects of --- and 2, 4-dinitrophenol on phosphorylation reactions and ion fluxes in Saccharomyces cerevisiae (Riemersma) (153) 80
- Sodium dodecyl sulphate
  - Selective deproteinization of ribosomes by --- (Stutz, Rawson)(161) 564
- Sodium efflux
  - --- from Chlorella pyrenoidosa (Barber) (150) 730
- Sodium influx
  - --- into denervated rat diaphragm muscle fibre (Adamič)(163) 137
- Sodium-ion transport
  - --- across the isolated skin of Ambystoma mexicanus (Aceves, Erlij, Edwards) (150) 744
- Sodium-potassium-activated ATPase
  - Effect of proteinase on the --- system of rat brain (Somogyi)(151) 421
- Sodium-potassium-activated ATPase
  - Ion translocase system from rabbit intestinal mucosa. Preparation and properties of the --- (Richardson)(150) 572
- Sodium-potassium-activated ATPase
  - Levels of --- and magnesium-activated ATPase activity in bovine and feline corneal endothelium and epithelium (Rogers)(163) 50
- Sodium-potassium-activated ATPase

Regulation of the --- enzyme system in rat kidney. I. The effect of adrenalectomy and the supply of sodium on the enzyme system (Jörgensen)(151) 212
Sodium-potassium-activated ATPase
--- in renal cell membranes of normal and methylpredisolone-treated rats (Manitius, Bensch, Epstein)(150) 563
Sodium-potassium-activated ATPase
Studies on ---. XIX. Occurrence and properties of a --- in Escherichia coli (Hafkenscheid, Bonting)(151) 204
Sodium potassium-activated ATPase
Studies on ---. XX. Properties of --- in rat liver (Bakkeren, Bonting)(150) 460
Sodium-potassium-activated ATPase
Studies on ---. XXI. Changes in --- activity and ouabain-sensitive $^{86}Rb^+$ uptake rate in regenerating rat liver (Bakkeren, Bonting) (150) 467
Sodium-potassium-activated ATPase
Thallium activation of the --- of rabbit kidney (Britten, Blank)(159) 160
Sodium-potassium-ATPase
Approximation of molecular weight of --- (Mizuno et al.)(168) 311
Sodium-potassium-ATPase
Effect of hydroxylamine and N-methylhydroxylamine on beef brain microsomal --- (Chignell, Titus)(159) 345
Sodium-potassium-ATPase
Stimulative and protective action of Sr^{2+} and Ba^{2+} on --- from cultured heart cells (Henn, Sperelakis)(163) 415
Sodium-potassium-ATPase
Studies on plasma membranes. VI. Differences in the effect of temperature on the ATPase and --- activities of plasma membranes isolated from rat liver and hepatoma (Emmelot, Bos)(150) 354
Sodium-potassium-dependent ATPase
Irreversible inactivation of --- and K^+-dependent phosphatase by fluoride (Yoshida et al.)(150) 162
Sodium-potassium-dependent ATPase
Manganese activation of a --- in pig brain microsomes (Atkinson, Hunt, Lowe) (167) 469
Sodium-potassium-dependent ATPase
Mechanism of cardiac glycoside inhibition of the --- from cardiac tissue (Matsui, Schwartz)(151) 655
Sodium-potassium-dependent ATPase
Relationship of Na^+, K^+ and Mg-ATP binding sites for the human erythrocyte stromal --- (Masiak, Green)(159) 340
Sodium-potassium-magnesium-ATPase
Effect of substrates and products on beef brain microsomal --- activity (Baskin, Leslie)(159) 509
Sodium pump
Proposed model for the --- (Stone)(150) 578
Sodium pump
Rates of action of potassium ion and ouabain on the --- in squid axons (Baker, Manil) (150) 328
Sodium transport
Action of noradrenalin and oxytocin on the active --- and the permeability of frog skin to water. Role of adenosine 3',5'-monophosphate (Bastide, Jard)(150) 113
Sodium transport
Active --- in the isolated bullfrog cornea (Candia, Askew)(163) 262
Sodium transport
Amino acid accumulation in the toad bladder: Relationship to transepithelial --- (Thier)(150) 253
Sodium transport
Anionic dependence of --- in frog skin (Tonnies Gil Ferreira)(150) 587
Sodium transport
Effect of a lipid extract of frog skin on shortcircuit current and --- of isolated frog skin (McAfee, Locke)(150) 131
Sodium transport
Effect on --- and vasopressin on the oxidation of palmitic acid by the toad bladder (Ferguson, Handler, Orloff)(163) 150
Sodium transport
--- and perfused axons (Baker et al.) (163) 560
Sodium transport
Role of the tricarboxylic acid cycle in the stimulation of --- by aldosterone (Falchuk, Sharp)(153) 706
Sorbose
Effect of --- on metabolism and morphology of Neurospora (Crocken, Tatum)(156) 1
Spermidine
Influence of --- on the reaction of RNA nucleotidyltransferase (Petersen, Kröger, Hagen)(161) 325
Spheroplasts
RNA synthesis in penicillin --- of Escherichia coli (Ehrenfeld, Koch)(169) 44
Spheroplasts
Role of a competence in the infection of Escherichia coli --- by isolated phage DNA (Iliashenko, Dityatkin, Danileichenko) (161) 259
Spheroplast membrane
Separation by density gradient centrifugation of two types of membrane from --- of Escherichia coli (Miura, Mizushima) (150) 159
Sphingoethanolamine
Structural elucidation of --- and its distribution in aquatic animals (Hori, Sugita, Arakawa)(152) 211
Sphingolipids
Enzymatic hydrolysis of ---. VII. Hydrolysis of gangliosides by a neuraminidase from calf brain (Leibovitz, Gatt)(152) 136
Sphingolipids
Studies on --- of fresh-water mussel spermatozoa (Higashi, Hori)(152) 568
Sphingolipid hydrolases
Lysosomal localization of --- (Weinreb, Brady, Tappel)(159) 141
Sphingomyelin
--- content of human serum: A genetic study (Chin)(152) 346
Sphingomyelin
Investigation of the enzymatic synthesis of --- (Fujino, Negishi)(152) 428
Sphingomyelins
Studies on sphingosines. XIII. The existence of phytosphingosine in bovine kidney --- (Karlsson, Steen)(152) 798
Sphingomyelin metabolism
--- in the intestinal tract of the rat (Nilsson) (164) 575
Sphingomyelinase
Effect of --- from Clostridium perfringens on the metabolic activity and phospholipid composition of thyroid slices (Macchia, Pastan)(152) 704
Sphingosine
Separation of ---, dihydrosphingosine and

phytosphingosine by chromatography on columns of silica gel (Barenholz, Gatt) (152) 790
Sphingosines
Studies on ---. XIII. The existence of phytosphingosine in bovine kidney sphingomyelins (Karlsson, Steen) (152) 798
Sphingosines
Studies on ---. XIV. On the phytosphingosine content of the major human kidney glycolipids (Karlsson, Mårtensson) (152) 230
Spiramycin
Altered ribosomes in --- -resistant mutants of Bacillus subtilis (Ahmed) (166) 218
Spiramycin
Cross resistance of Escherichia coli B ribosomes to inhibition of the puromycin reaction by erythromycin, --- and chloramphenicol (Cerná, Rychlík) (157) 436
Spiramycin
Mechanism of inhibition of protein synthesis by --- (Ahmed) (166) 205
Spleen nuclei
Protein synthesis in isolated rat --- (Tsuzuki, Naora) (169) 550
Sporangiophore
Chemical composition of --- walls of Mucor rouxii (Bartnicki-Garcia, Reyes) (165) 32
Spores
Genetic similarity between the ribosomal RNA from --- and vegetative cells of Bacillus subtilis (Bishop, Doi) (169) 278
Spores
Radioresistant nature of the transforming activity of DNA in bacterial --- (Tanooka, Sakakibara) (155) 130
Spore germination
Bacillus cereus ---: Absolute requirements for and amino acid (Warren, Gould) (170) 341
Spore spheroplasts
Ultraviolet resistance of DNA in --- of Bacillus subtilis as measured by the transforming activity (Tanooka) (166) 581
Squid axons
Demonstration of phospholipid splitting as the factor responsible for increased permeability and block axonal induced by snake venom. II. Study on --- (Condrea, Rosenberg) (150) 271
Squid axons
Rates of action of potassium ion and ouabain on the sodium pump in squid axons (Baker, Manil) (150) 328
Staphylococcus aureus
Occurrence of dehydrosqualene (C_{30} phytoene) in --- (Suzue, Tsukada, Tanaka) (164) 88
Staphylococcus aureus
Studies on extracellular protein from ---. III. Investigations on the heterogeneity of hyaluronate lyase using the method of isoelectric focusing (Vesterberg) (168) 218
Staphylococcus aureus
Studies on extracellular proteins from ---. IV. Separation of α-toxin by isoelectric focusing (Wadström) (168) 228
Stearic acid monolayers
Differential effect of sodium and potassium on calcium adsorption to --- (Yamauchi et al.) (150) 181
Stereum frustulatum
Degradation of the lignin model compound syringylglycol-β-guaiacyl ether by Polyporus versicolor and --- (Kirk, Harkin, Cowling) (165) 145
Stereum frustulatum
Oxidation of guaiacylglycerol-β-guaiacyl ether and veratrylglycerol-β-guaiacyl ether by Polyporus versicolor and --- (Kirk, Harkin, Cowling) (165) 134
Steroids
Effect of ethanol on the concentrations of solvolyzable plasma --- (Cronholm, Sjövall) (152) 233
Steroids
Involvement of adrenal --- in the changes of polysome organization during feeding of unbalanced amino acid diets (Cammarano et al.) (155) 302
Steroids
IUPAC-IUB Tentative revised rules for the nomenclature of --- (IUPA-IUB Commission on Biochemical Nomenclature and IUPAC Commission on the Nomenclature of Organic Chemistry (164) 453
Steroid
RNA polymerase activity of the chick oviduct during --- -induced synthesis of a specific protein (McGuire, O'Malley) (157) 187
Steroid alcohol sulphotransferase
Enzymic synthesis of steroid sulphates. VII. Association-dissociation equilibria in the --- of human adrenal gland extracts (Adams, Edwards) (167) 122
Steroid biosynthesis
Cytochrome P-450 and --- in the human placenta (Meigs, Ryan) (165) 476
Steroid biosynthesis
Free --- from 5-[4-^{14}C] pregnenolone in normal human adrenal tissue (Axelrod, Goldzieher) (152) 391
Steroid epimerase
--- – a new enzyme of estrogen metabolism (Dahm, Lindlau, Breuer) (159) 377
Steroid hormones
Steroid-protein interactions. XIX. Complex formation between α_1-acid glycoprotein and --- (Kerkay, Westphal) (170) 324
Steroid molecules
Location of hydroxy groups introduced to --- by adrenal and testicular enzymes (Nakano et al.) (152) 186
Steroid phosphates
Enzymic hydrolysis of --- (Botte, Koide) (152) 396
Steroid-protein interactions
---. XIX. Complex formation between α_1-acid glycoprotein and steroid hormones (Kerkay, Westphal) (170) 324
Steroid-protein interactions
--- studied by fluorescence quenching (Attallah, Lata) (168) 321
Steroid sulphates
Enzymic synthesis of ---. VII. Association-dissociation equilibria in the steroid alcohol sulphotransferase of human adrenal gland extracts (Adams, Edwards) (167) 122
Sterols
H-migration in the alkylation of --- at C-24 (Raab, De Souza, Nes) (152) 742
Sterols
Role of --- in Saccharomyces cerevisiae (Proudlock et al.) (152) 431
Sterol biosynthesis
Inhibition of in vitro --- by phenylalanine (Shah, Peterson, McKean) (164) 604
Streptidine
Biosynthesis of streptomycin: Origin of --- from D-glucose (Bruce, Ragheb, Weiner)

- (158) 499
- Streptomyces
  - Occurrence of α(1–3) glucan in Cryptococcus, Schizosaccharomyces and Polyporus species, and its hydrolysis by a --- culture filtrate lysing cell walls of Cryptococcus (Bacon et al.)(158) 313
- Streptomyces griseus
  - Metabolism of scyllo-inositol in --- (Horner, Thaker)(165) 306
- Streptomyces griseus proteinase
  - Studies on ---. I. Separation of DFP-reacting enzymes and purification of one of the enzymes (Wählby)(151) 394
- Streptomyces griseus proteinase
  - Studies on ---. II. The amino acid sequence around the reactive serine residue of DFP-sensitive components with esterase activity (Wählby, Engström)(151) 402
- Streptomyces madurae
  - Extracellular collagenase produced by --- (Rippon)(159) 147
- Streptomyces rimosus
  - Biosynthesis of phenols. XV. Isolation of some shikimic acid-derived metabolites from mutant strains of --- unable to produce oxytetracycline (Catlin, Hassall, Pratt) (156) 109
- Streptomyces sioyaensis
  - Siolipin A: A new lipoamino acid ester isolated from --- (Kawanami, Kimura, Otsuka) (152) 808
- Streptomycin
  - Biosynthesis of ---: Origin of streptidine from D-glucose (Bruce, Ragheb, Weiner) (158) 499
- Streptomycin biosynthesis
  - ---: Enzymatic synthesis of scyllo-inosamine from scyllo-inosose and L-glutamine (Walker, Walker)(170) 219
- Streptovaricin
  - Inhibition of DNA-dependent RNA polymerase reaction of Escherichia coli by an antimicrobial antibiotic, --- (Mizuno et al.) (157) 322
- Stringent Escherichia coli
  - RNA synthesis in "relaxed" Escherichia coli and ---. Breakdown of preformed ribonucleoprotein particles and subsequent RNA synthesis (Dalgarno, Gros)(157) 64
- Strongylocentrotus purpuratus
  - Elastic-mathematical theory of cells and mitochondria in swelling process. V. Transformation of cortical granule membrane of egg cell of --- in subelastic and elastic swelling (Mela)(150) 541
- Strongylocentrotus purpuratus
  - Elastic-mathematical theory of cells and mitochondria in swelling process. VI. Ultrastructure of membrane region in the egg cell of the sea urchin (---) in subelastic and elastic swelling (Mela)(150) 553
- Strontium ion
  - Stimulative and protective action of --- and Ba^{2+} on (Na^{+}-K^{+})-ATPase from cultured heart cells (Henn, Sperelakis)(163) 415
- Structural protein
  - Binding of nucleotides to --- of wild-type and respiration-deficient yeast mitochondria (Tuppy, Swetly)(153) 293
- Structural protein
  - Phosphorylation of --- catalyzed by rat-liver mitochondria (Pinna, Moret)(153) 494
- Submaxillar gland
  - Testosterone effect on the synthetic rate of two esteropeptidases in the mouse --- (Calissano, Angeletti)(156) 51
- Submaxillary mucins
  - Water vapor sorption of bovine and porcine --- (Bettelheim, Block)(165) 405
- Submitochondrial particles
  - Cation binding to --- (Scarpa, Azzi)(150) 473
- Submitochondrial particles
  - Effect of deuterium oxide on respiratory-chain phosphorylation in --- (Muraoka, Slater)(162) 170
- Submitochondrial particles
  - Respiratory control in --- obtained by sonication (Vallin)(162) 477
- Submitochondrial particles
  - Steady-state changes in loosely coupled --- induced by ADP and uncouplers (Malviya, Nicholls, Elliott)(153) 920
- Substrate accumulation
  - --- by mitochondria (Van Dam, Tsou) (162) 301
- Subtilisin
  - Preparation of water-insoluble, enzymatically active derivatives of --- type Novo by cross-linking with glutaraldehyde (Ogata, Ottesen, Svendsen)(159) 403
- Subtilopeptidase A
  - Effects of Bacillus subtilis protease, Type VIII(---) on isolated adipose cells. Fructose utilization and its inhibition by avenaciolide, piericidin A and puromycin (Kuo) (165) 208
- Succinate oxidation
  - Inhibition of --- in isolated mitochondria by uncouplers (Papa et al.)(153) 306
- Succinate semialdehyde dehydrogenase
  - Characterization of --- from rat brain (Kammeraat, Veldstra)(151) 1
- Succinic acid
  - Microbial degradation of progesterone to α-ketoglutaric acid and --- (Schubert et al.) (152) 401
- Succinyl-CoA synthetase
  - Identification of --- as the major phosphorylated protein formed from ATP in Escherichia coli extracts (Sedmak, Ramaley) (170) 440
- Sucrase
  - Immunochemical study of isolated human and rabbit intestinal --- (Cummins et al.) (160) 396
- Sugar active transport system
  - Spatial relationship between intestinal disaccharidases and the --- (Malathi, Crane)(163) 275
- Sugar transport
  - Action of cardiotonic steroids on --- in muscle, in vitro (Bihler)(163) 401
- Sugar transport
  - Transport of some amino acids and --- in rat-liver slices (Crawhall, Segal)(163) 163
- Sugar transport system
  - Inclusion of L-glucose within the specificity limits of the active --- of hamster small intestine (Caspary, Crane)(163) 395
- Sugar utilization
  - Regulation of --- by Aspergillus nidulans (Romano, Kornberg)(158) 491
- Sulphatase
  - --- of ox liver. XI. The isoelectric focussing of a purified preparation of sulphatase (Allen, Roy)(168) 243
- Sulphate transport system
  - --- of Chlorella pyrenoidosa and its regulation. I. Permeation kinetics (Vallée,

Jeanjean)(150) 599

Sulphate transport system
- --- of Chlorella pyrenoidosa and its regulation. II. The regulation of entry (Vallée, Jeanjean)(150) 607

Sulphhaemoglobin
- Mechanism of formation of --- (Nichol et al.)(156) 97

Sulphite reductase
- Studies on Saccharomyces cerevisiae ---. I. Purification and characterization (Yoshimoto, Sato)(153) 555

Sulphite reductase
- Studies on Saccharomyces cerevisiae ---. II. Partial purification and properties of genetically incomplete sulphite reductases (Yoshimoto, Sato)(153) 576

S-Sulpho-fibrinogen
- Differences between plasmic and tryptic digests of human --- (Wallén, Iwanaga) (154) 414

Sulphur
- Oxidation of elemental --- by an enzyme system from Thiobacillus neapolitanus (Taylor)(170) 112

Super-suppression
- Amino acid replacements resulting from --- of a nonsense mutant of yeast (Gilmore, Stewart, Sherman)(161) 270

Suppression
- Selective --- of nucleolar RNA metabolism in the absence of protein synthesis (Higashi et al.)(166) 388

Surface-active agents
- Effect of --- on post-heparin lipase activity (Doizaki, Zieve)(152) 713

Swelling
- Action of Dio-9: Energy-linked --- of rat-liver mitochondria (Fisher, Guillory) (162) 182

Swelling process
- Elastic-mathematical theory of cells and mitochondria in ---. V. Transformation of cortical granule membrane of egg cell of Strongylocentrotus purpuratus in subelastic and elastic swelling (Mela)(150) 541

Swelling process
- Elastic-mathematical theory of cells and mitochondria in ---. VI. Ultrastructure of membrane region in the egg cell of the sea urchin (Strongylocentrotus purpuratus) in subelastic and elastic swelling (Mela) (150) 553

Synaptic vesicles
- Stimulatory effect of NA^+ and ATP on the release from --- (Matsuda, Hata, Yoshida) (150) 739

Syringylglycol-β-guaiacylether
- Degradation of the lignin model compound --- by Polyporus versicolor and Stereum frustulatum (Kirk, Harkin, Cowling) (165) 145

T

Taka-amylase A
Introduction of sulphydryl groups into --- and changes in enzymic activity (Suzuki, Hachimori, Matoba)(167) 641
Tamm–Horsfall mucoprotein
Viscosity of --- (Stevenson)(160) 296
Taurine transport
Studies on intraocular ---. I. Accumulation in rabbit ciliary body–iris preparation in vitro (Reddy)(158) 246
Temperature sensitivity
--- of the weak bonds by which chloramphenicol is held in intact cells (Hurwitz, Braun)(157) 392
Template
--- capabilities and size distribution of echinoid RNA during early development (Slater, Spiegelman)(166) 82
Template
Influence of ionic strength and a polyanion on transcription in vitro. II. Effects on the --- efficiency of rat liver chromatin for a purified bacterial RNA polymerase (Chambon et al.)(157) 520
Tenotomy
α-Aminoisobutyric acid uptake in vitro by the rat extensor digitorum longus muscle after denervation and --- (Bombara, Bergamini)(150) 226
5'-Terminal
--- end group of RNA of bacteriophage MS2 (De Wachter, Verhassel, Fiers)(157) 195
Terminal deoxynucleotidyl transferase
Facile separation of --- and replicative deoxynucleotidyl transferase of Walker-256 carcinosarcoma (Rothschild, Halpern, Smith)(169) 218
3', 5'-Terminal hydroxy phosphorylated dinucleotide
Isolation and identification of --- in the autodegradation products of rat liver ribosomes (Goto, Mizuno)(166) 663
Terminal pCpCpA sequence
Integrity of the --- of tRNA's extracted from yeasts in different growth states (Giege, Ebel)(161) 125
5'-Terminal phosphate
Effect of --- on the recognition of some dinucleoside phosphates by [^{14}C]aminoacyl-tRNA (Grünberger, Holý, Sorm)(157) 439
α-Terpineol
Conversion of linalool to --- in citrus (Attaway, Buslig)(164) 609
Testicular enzymes
Location of hydroxy groups introduced to steroid molecules by adrenal enzymes and --- (Nakano et al.)(152) 186
Testis
Lipid composition of the prepubertal and adult rat --- (Oshima, Carpenter)(152) 479
Testosterone
Differential effects of etiocholanolone on phospholipid–cholesterol structures containing either --- or estradiol (Sessa, Weissmann)(150) 173
Testosterone
Effects of estradiol and --- on the incorporation and distribution of [Me-^{14}C]methionine methyl in rat liver lecithins (Lyman et al.)(152) 197
Testosterone
Effect of --- on β-glycosidases in rooster comb and wattles (Robinson, Stirling) (170) 420
Testosterone
--- effect on the synthetic rate of two esteropeptidases in the mouse submaxillar gland (Calissano, Angeletti)(156) 51
Testosterone
Influence of --- on penetration of α-aminoisobutyric acid and 2-deoxyglucose in male rat sex accessory tissues (Mills, Spaziani) (150) 435
Testosterone
Possible mechanism of regulation of rat prostate function by --- (Farnsworth) (150) 446
Testosterone acetate
Incorporation of molecular oxygen into --- directly derived from progesterone by Cladosporium resinae (Nakano, Sato, Tamaoki)(164) 585
Tetanus toxin
Molecular weight of --- (Mangalo et al.) (168) 583
Tetrachloromethane
Biochemical effects of --- on rat intestinal mucosa (Alpers, Isselbacher)(158) 414
Tetracycline
Studies on the intracellular localization of --- in bacteria (Connamacher, Mandel) (166) 475
Tetrahydrofolate
Effects of orotic acid on dihydrofolate dehydrogenase and on --- -dependent enzymes in the chick liver (Pasquali et al.) (158) 482
Tetrahymena
Biosynthesis of 2-aminoethylphosphonic acid in --- (Horiguchi, Kittredge, Roberts) (165) 164
Tetrahymena pyriformis
Characterization of ribosomes of --- (Weller, Raina, Johnstone)(157) 558
Tetrahymena pyriformis
Formation of ribosomes in --- (Leick, Plesner)(169) 398
Tetrahymena pyriformis
Precursors of ribosomal sub-units in --- (Leick, Plesner)(169) 409
Tetralin hydroperoxide
Mechanism of aliphatic hydroxylation: --- as an intermediate in the hydroxylation of tetralin in rat-liver homogenate (Chen, Lin) (170) 366
Tetranitromethane
Probable protein crosslinking with --- (Doyle, Bello, Roholt)(160) 274
Tetrasaccharide
Structure of the --- produced by the hydrolysis of nigeran by the enzyme mycodextranase (Tung, Nordin)(158) 154
Tetrodotoxin
--- interaction with squid nerve membrane lipids (Villegas, Camejo)(163) 421
Thallium activation

--- of the sodium-potassium-activated ATPase of rabbit kidney (Britten, Blank) (159) 160
Thaw contraction
Role of phosphate compounds in --- and the mechanism of thaw rigor (Kushmerick, Davies)(153) 279
Thermal analysis
Physical studies of myelin. I. --- (Ladbrooke et al.)(164) 101
Thermal effects
Nuclear magnetic resonance study of --- upon base stacking in oligonucleotides: ApA > p(Hruska, Danyluk)(157) 238
Thermophilic bacteria
Studies of the DNA from mesophilic bacteria and --- (Stenesh, Roe, Snyder)(161) 442
Thiamin
Enzymatic synthesis of triphospho- --- (Itokawa, Cooper)(158) 180
Thiamine
Effect of antivitamins on the microbiological biosynthesis of vitamins. III. Relation between amounts of ---, thiamine monophosphate and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (Sicho, Králová)(165) 459
Thiamine
Role of --- in nervous tissue: The mechanism of action of pyrithiamine (Cooper) (156) 368
Thiamine
Studies on the physiological functions of ---. III. The phosphorylation of thiamine in brain (Johnson, Gubler)(156) 85
Thiamine biosynthesis
---. II. A novel biosynthetic transformation of the S-methyl moiety of methionine (Torrence, Tieckelmann)(158) 183
Thiamine diphosphate
Effect of antivitamins on the microbiological biosynthesis of vitamins. III. Relation between amounts of thiamine, thiamine monophosphate and --- in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (Sicho, Králová)(165) 459
Thiamine monophosphate
Effect of antivitamins on the microbiological biosynthesis of vitamins. III. Relation between amounts of thiamine, --- and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (Sicho, Králová)(165) 459
Thin-layer chromatograms
Detection of lipids on --- with the periodate-Schiff reagents (Shaw)(164) 435
Thin-layer chromatography
Phospholipids in tissue of the eye. I. Isolation, characterization and quantitative analysis by two-dimensional --- of diacyl and vinyl ether phospholipids (Broekhuyse)(152) 307
Thin-layer chromatography
Quantitative analysis of simple lipid classes by --- (Skipski et al.)(152) 10
Thin-layer electrophoresis
--- of nucleic acid derivatives on microcrystalline cellulose (Augusti-Tocco et al.) (155) 8
Thiobacillus neapolitanus
Oxidation of elemental sulphur by an enzyme system from --- (Taylor)(170) 112
Thiol disulphide interchange
Studies related to the concept that a --- is involved in the action of insulin on muscle cells (Wohltmann, Narahara)(150) 500
Thiol: protein-disulphide oxidoreductase
Rat-liver --- (Spolter, Vogel)(167) 525
Thiomethyl-β-D-galactoside accumulation
Studies on the relation of --- to thiomethyl-β-D-galactoside phosphorylation in Staphylococcus aureus (Laue, MacDonald) (165) 410
Thiomethyl-β-D-galactoside phosphorylation
Studies on the relation of thiomethyl-β-D-galactoside accumulation to --- in Staphylococcus aureus (Laue, MacDonald) (165) 410
4-Thiouracil
Radiolysis of --- and of the --- moieties of 4-thiouridine and transfer RNA from Escherichia coli in aqueous solutions (Sörbo, Lundberg)(157) 445
Thriouracil
Reaction of --- with β-lactoglobulin sulphenyl iodide (Jirousek)(170) 152
Thiouracil binding
Stimulation of --- and the iodination system in beef thyroid microsomes (Jirousek, Cunningham)(170) 160
4-Thiouridine
Radiolysis of 4-thiouracil and of the 4-thiouracil moieties of --- and transfer RNA from Escherichia coli in aqueous solutions (Sörbo, Lundberg)(157) 445
4-Thiouridylyl-(3'-5')-4-thiouridine
Synthesis and properties of ---, 4-thiouridylyl-(3'-5')-uridine and uridylyl-(3'-5')-4-thiouridine (Scheit)(166) 285
4-Thiouridylyl-(3'-5')-uridine
Synthesis and properties of 4-thiouridylyl-(3'-5')-4-thiouridine, --- and uridylyl-(3'-5')-4-thiouridine (Scheit)(166) 285
Threonine
Effect of temperature on the K_S for homoserine and the K_i for --- of homoserine dehydrogenase from Chlamydomonas reinhardti (Vincze, Dénes)(159) 423
Threonine deaminase
Cell preparation for the assay of --- in Escherichia coli (Desai)(167) 467
Threonine dehydratase
--- of Bacillus licheniformis. I. Purification and properties (Leitzmann, Bernlohr) (151) 449
Threonine dehydratase
--- of Bacillus licheniformis. II. Regulation during development (Leitzmann, Bernlohr) (151) 461
Threonine dehydratase
Effects of histones on induction of hepatic --- (Young, Irvin)(157) 643
Threonine dehydratase
Mechanism of the inactivation of --- during the dehydration of serine (Phillips) (151) 523
Threshold potential
Na^+ and Ca^{2+} dependence of --- in frog skin excitation (Lindemann)(163) 424
Thrombin
Release reactions of human platelets induced by --- and other agents (Davey, Lüscher) (165) 490
Thrombokinase
Action of human --- on human prothrombin and p-tosyl-L-arginine methyl ester (Aronson, Ménaché)(167) 378

Thymidine
--- content and turnover in the rat (Gross, Rabinowitz)(157) 648
[^{14}C]Thymidine
Thymidine kinase, thymidylate kinase and $^{32}P_i$ and --- incorporation into DNA during early embryogenesis of the sea urchin (Nagano, Mano)(157) 546
Thymidine kinase
--- and polyribosome distribution in regenerating rat liver following 5-azacytidine (Cihák, Veselá, Sorm)(166) 277
Thymidine kinase
---, thymidylate kinase and $^{32}P_i$ and [^{14}C]thymidine incorporation into DNA during early embryogenesis of the sea urchin (Nagano, Mano)(157) 546
Thymidine phosphorylase
Constitutivity of --- in deoxyriboaldolase negative strains: Dependence on thymine requirement and concentration (Beacham, Barth, Pritchard)(166) 589
Thymidylate kinase
Thymidine kinase, --- and $^{32}P_i$ and [^{14}C]thymidine incorporation into DNA during early embryogenesis of the sea urchin (Nagano, Mano)(157) 546
Thymine
Efficiency of utilization of --- and 5-bromouracil for normal and repair DNA synthesis in bacteria (Kanner, Hanawalt) (157) 532
Thymine
Incorporation of hydrogen into products of --- radiolysis (Drasil, Ryznar, Jurasková) (166) 600
Thymine
Pyrimidine deoxyribonucleoside phosphorylase. I. Substrate inhibition by --- (Lyon Jr.)(159) 38
Thymine
Specificity of pancreatic ribonuclease towards 2', 3'-cyclic phosphates derived from D-lyxofuranosyl derivatives of --- (Holý, Sorm)(161) 264
Thymine dimers
Structures of the isomeric --- as deduced from their dipole moments (Weinblum, Ottensmeyer, Wright)(155) 24
Thymine dimers
Trans-syn --- in ultraviolet-irradiated denatured DNA: Identification and photoreactivability (Ben-Hur, Ben-Ishai)(166) 9
Thymineless death
--- induced by cytosine arabinoside (Atkinson, Stacey)(166) 705
Thymineless death
Influence of chloroamphenicol on --- in bacteria (Ganguli, Bhattacharjee)(169) 545
Thymineless mutants
--- of Escherichia coli with deficiencies in deoxyribomutase and deoxyriboaldolase (Munch-Petersen)(161) 279
Thymine radical
Formation of the --- in irradiated DNA (Lenherr, Ormerod)(166) 298
Thymocytes
Observations on the permeability of --- to non-electrolytes (Kodama, Tedeschi) (163) 277
Thymocytes
Specificity and thermodynamic properties of the corticosteroid binding to a receptor of rat --- in vitro (Schaumburg, Bojesen) (170) 172
Thymus nuclei
New type of deoxyribonucleoprotein isolated from rabbit --- (Rees, Krueger)(161) 558
Thyrocalcitonin
Entry of sugars into bone cells. Independence from parathyroid extract and --- effects (Dos Reis, Rosenbusch, Nichols Jr.) (150) 311
Thyroglobulin
Amino acid sequence of a tryptic glycopeptide from human --- (Rawitch, Liao, Pierce) (160) 360
Thyroglobulin
Human ---: Physicochemical properties in relation to iodine content (Valenta et al.) (168) 507
Thyroglobulin
Preparation of highly purified human --- (Cheng, Peterson, Evans)(168) 161
Thyroid microsomes
Stimulation of thiouracil binding and the iodination system in beef -- (Jirousek, Cunningham)(170) 160
Thyroid-stimulating hormone
Stimulation of RNA formation and phospholipid formation by long-acting thyroid stimulator and by --- (Ochi, DeGroot) (170) 198
Thyroxine
Actinomycin D inhibition of --- -induced synthesis of carbamyl phosphate synthetase (Kim, Cohen)(166) 574
Thyroxine
Changes of enzyme activities with diet and --- during postnatal development of the rat (Hémon, Berbey)(170) 235
Thyroxine
Counter-current distribution of RNA from rat liver: Effect of growth hormone, ---, and hydrocortisone on distribution patterns (Jackson, Sells)(155) 417
Tinca tinca
Intraspecific polymorphism of haemoglobin in --- (Callegarini, Cucchi)(160) 264
Tissue slices
Effect of transient swelling upon the composition of kidney --- (Wiggins)(158) 281
Tissue specificities
Studies on --- of nuclear and ribosomal RNA using the DNA × RNA hybridization technique (Bielka, Junghahn)(166) 698
Toad bladder
Differences in the physiological characteristics of --- from different geographical sources (Davies, Martin, Sharp)(150) 315
Toad bladder
Lecithin and lysolecithin metabolism by isolated mucosal cells of the --- (Rosenbloom, Elsbach)(164) 72
Tobacco mosaic virus
Wild-type and defective coat proteins of ---: Electrophoretic analysis of plant extracts in polyacrylamide gels (Sarkar, Jockusch) (160) 259
Tonicity
Stability of electrical coupling in leech giant nerve cells: Divalent cations, propionate ions, --- and pH (Payton, Loewenstein) (150) 156
Torulopsis ernobii
Physical and chemical properties of lipase from --- (Motai, Ichishima, Yoshida) (154) 586
Toxin
Cation-exchange chromatography of Clo-

stridium botulinum type A --- on Amberlite IRC-50 resin at pH 5.55 (DasGupta, Boroff, Cheong)(168) 522

Toxin
Purification and some properties of Clostridium botulinum type-E --- (Kitamura, Sakaguchi, Sakaguchi)(168) 207

α-Toxin
Studies on extracellular proteins from Staphylococcus aureus. IV. Separation of --- by isoelectric focusing (Wadström) (168) 228

Trace metal
--- composition of photosynthetic bacteria (Kassner, Kamen)(153) 270

Transaminases
Branched chain amino acid ---. IV. Purification and properties of two enzymes from rat liver (Aki, Ogawa, Ichihara)(159) 276

Transaminases
Branched chain amino acid ---. V. Activity change in developing and regenerating rat liver (Ichihara, Takahashi)(167) 274

Transcription
Influence of ionic strength and a polyanion --- in vitro. I. Stimulation of the aggregate RNA polymerase from rat liver nuclei (Chambon et al.)(157) 504

Transcription
Influence of ionic strength and a polyanion on --- in vitro. II. Effects on the template efficiency of rat liver chromatin for a purified bacterial RNA polymerase (Chambon et al.)(157) 520

Transcription
--- of the tryptophan operon of Escherichia coli in vitro. I. Detection and quantitative determination of specific RNA (Yura et al.) (169) 494

Transferrin
Electrophoretic study on the denaturation of human --- by urea (Bron, Isliker)(154) 61

Transferrin
Iron- --- complex formation (Ross, Kochwa, Wasserman)(154) 70

Transferrin
Iron-transporting system in the body (Van Eyk, Leijnse)(160) 126

Transfer RNA
Bias of the distribution of the 2'-O-methylribonucleotide constituents of yeast --- (Morisawa, Chargaff)(169) 285

Transfer RNA
Binding of aminoacyl --- to complexes of Escherichia coli ribosomes and plant viral RNA (Verhoef, Kraal, Bosch)(155) 456

Transfer RNA
Binding of proflavine to ---: Dependence on secondary structure (Grosjean, Wérenne, Chantrenne)(166) 616

Transfer RNA$_1$
Binding of valine --- fragments to 70-S, 50-S and 30-S ribosomal particles (Mirzabekov, Grünberger, Bayev)(166) 68

Transfer RNA
Chemical synthesis of glycylglycyl[^{14}C]-phenylalanyl --- and glycylglycylglycyl[^{14}C]-phenylalanyl --- (Lapidot et al.) (157) 433

Transfer RNA
Cupric ion catalysis in hydrolysis of aminoacyl --- (Schofield, Zamecnik)(155) 410

Transfer RNA
Different anticodons in purified valine --- fractions from yeast (Mirzabekov et al.) (166) 75

Transfer RNA
Effect of 5'-terminal phosphate on the recognition of some dinucleoside phosphates by [^{14}C]aminoacyl --- (Grünberger, Holý, Sorm)(157) 439

Transfer RNA
Fluorescence assay for phenylalanine --- (Yoshikami et al.)(166) 714

Transfer RNA
Fractionation of Escherichia coli --- on benzoylated DEAE-cellulose (Roy, Söll) (161) 572

Transfer RNA
Inhibition of acceptor activity of --- by specific antibodies against --- (Pulkrábek, Raška Jr., Rychlík)(157) 652

Transfer RNA
Integrity of the terminal pCpCpA sequence of --- extracted from yeasts in different growth states (Giege, Ebel)(161) 125

Transfer RNA
Isolation and properties of undermethylated phenylalanine --- from a relaxed mutant of Escherichia coli (Shugart, Novelli, Stulberg)(157) 83

Transfer RNA
Methylation of ribosomal RNA precursor and --- in rat liver (Muramatsu, Fujisawa) (157) 476

Transfer RNA
Modification of nucleosides and nucleotides. VII. Selective cyanoethylation of inosine and pseudouridine in yeast --- (Yoshida, Ukita)(157) 455

Transfer RNA
Modification of nucleosides and nucleotides. VIII. The reaction rates of pseudouridine residues with acrylonitrile and its relation to the secondary structure of --- (Yoshida, Ukita)(157) 466

Transfer RNA
Modification of nucleosides and nucleotides. IX. Inactivation of coding response of yeast --- containing inosine residue by cyanoethylation (Yoshida et al.)(166) 636

Transfer RNA
Modified aminoacyl ---. IV. The behaviour of acyl [^{14}C]phenylalanyl --- in a ribosomal system from wheat germ (De Groot et al.) (161) 137

Transfer RNA
Preparation of --- from Escherichia coli (Gutcho)(157) 76

Transfer RNA$_F$
Purification of Escherichia coli methionine --- and methionine transfer RNA$_M$ and studies on their biophysical and biochemical properties (Seno, Kobayashi, Nishimura)(169) 80

Transfer RNA$_M$
Purification of Escherichia coli methionine transfer RNA$_F$ and methionine --- and studies on their biophysical and biochemical properties (Seno, Kobayashi, Nishimura)(169) 80

Transfer RNA
Radiolysis of 4-thiouracil and of the 4-thiouracil moieties of 4-thiouridine and --- from Escherichia coli in aqueous solutions (Sörbo, Lundberg)(157) 445

Transfer RNA
Selective loss of binding of aminoacyl --- by ribosomes treated with diethanoldisulphide (Furano)(161) 255

Transfer RNA
Species specificity of L-histidine acceptor --- from microbes (Takeda)(169) 272
Transfer RNA
Specific hybridization of amino acid-specific --- to DNA in Escherichia coli (Seno, Nishimura)(157) 97
Transfer RNA
Stability of peptidyl ---. The intermediate of protein synthesis (Bresler et al.)(155) 465
Transfer RNA
Studies on methionyl-tRNA synthetase. III. Enzyme dependence for maximum methionyl --- formation (Svensson)(167) 179
Transfer RNA
Temperature-induced lesion in amino acid --- attachment in a psychrophile (Malcolm) (157) 493
Transfer RNA
Transitional characteristics of ribosomes and coding properties of --- in the mutant of Bacterium paracoli with the increased GC of DNA (Gause, Grünberger)(166) 538
Transfer RNA
Ultraviolet inactivation of amino acid acceptance of --- (Wade et al.)(161) 469
Transforming activity of DNA
Radioresistant nature of the --- in bacterial spores (Tanooka, Sakakibara)(155) 130
Transforming DNA
Inactivation of --- by tritium disintegrations in vivo (McCarthy, Nester)(166) 249
Translocase system
Ion --- from rabbit intestinal mucosa. Preparation and properties of the sodium–potassium-activated ATPase (Richardson) (150) 572
Transmural potentials
Studies on --- in vitro in relation to intestinal absorption. V. Kinetic characteristics of lipid interactions with rat gut (Lyon) (163) 75
Transport
Comparison of intestinal penetration of cortisol and convallatoxin: Demonstration of a --- mechanism for cardiotonic steroids (Lauterbach)(150) 146
Transport
Role of cellular P_i in P_i --- and metabolism in human erythrocytes (Glader, Omachi) (150) 524
Transport-associated phosphorylation
--- of 2-deoxy-D-glucose and 2-deoxy-D-glucose transport in yeast (Van Steveninck)(163) 386
Transport of organic acid
Azotemic inhibition of --- in the liver (Ciccone et al.)(163) 108
Transport of Zn^{2+}, Co^{2+} and Ni^{2+}
--- into yeast cells (Fuhrmann, Rothstein) (163) 325
Tricarboxylic acid cycle
Role of the --- in the stimulation of sodium transport by aldosterone (Falchuk, Sharp) (153) 706
1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
Effect of --- on RNA metabolism in Musca domestica L. (Balazs, Agosin)(157) 1
Triglycerides
Action of some effectors on the hydrolysis of long-chain --- by pancreatic lipase (Benzonana, Desnuelle)(164) 47
Triglycerides
Biosynthesis of --- from doubly labelled 2-monopalmitin in the intestinal mucosa of the rat (Paris, Clement)(152) 63
Triglycerides
Effects of ethionine on the structure of liver --- (Sugano et al.)(152) 781
Triglyceride
Effect of glucose and insulin in vitro on the uptake of --- and on lipoprotein lipase activity in fat pads from normal fed rats (Austin, Nestel)(164) 59
Triglycerides
Metabolism of chyle --- in the liver. II. Distribution of radioactivity between subcellular components after the intravenous injection of glycerol- and fatty acid-labelled chyle into the carbohydrate-fed rat (Belfrage)(152) 266
Triglycerides
Penta-acid --- of Chamaepeuce afra seed oil (Mikolajczak, Smith Jr.)(152) 244
Triglycerides
Role of Ca^{2+} during the hydrolysis of insoluble --- by pancreatic lipase in the presence of bile salts (Benzonana)(151) 137
Triglyceride
Secretion of --- by the liver after partial hepatectomy (Fex, Olivecrona)(164) 424
Triglycerides
Separation and characterization of phytanic acid-containing plasma --- from a patient with Refsum's disease (Laurell) (152) 75
Triglycerides
Study of endogenous fatty acids of the lymphatic chylomicron triglycerides in the rat after administration of various mixed labelled --- (Boucrot, Clément)(164) 558
3β,17α,21-Trihydroxypregn-5-en-20-one
Cortisol biosynthesis from --- by the intact human foetus at midpregnancy (Pasqualini et al.)(152) 648
Triiodothyronine
Action of insulin and --- on energy-controlled pathways of hydrogen (Schäfer, Nägel) (162) 617
Trimethylaminoethylphosphonic acid
Incorporation of --- and dimethylaminoethylphosphonic acid into lipids of housefly larvae (Bieber)(152) 778
4,8,12-Trimethyltridecanoic acid
---: Isolation and identification from sheep perinephric fat (Hansen)(164) 550
4,8,12-Trimethyltridecanoic acid
Occurrence of --- in the tissues of rats fed high levels of phytanic acid (Hansen, Shorland, Prior)(152) 642
Triose phosphate isomerase
Kinetics of --- (Burton, Waley)(151) 714
Triphosphoinositide
Structure of enzymically produced diphosphoinositide and --- (Prottey, Salway Hawthorne)(164) 238
Triphosphopyridine nucleotides
Changes in the level of --- during development of sea-urchin eggs (normal and lethal hybrids)(Denis)(157) 212
Triphosphothiamin
Enzymatic synthesis of --- (Itokawa, Cooper)(158) 180
Triribonucleoside diphosphates
Synthesis and coding properties of 8-azaguanosine-containing --- (Grünberger, Holý, Šorm)(161) 147
Tris(hydroxymethyl)aminomethane
Inhibition of univalent cation activated enzymes by --- (Betts, Evans)(167) 193

Tris(hydroxymethyl)aminomethane
    Reaction of --- with cinnamoyl imidazole and cinnamoyltrypsin (Oliver, Viswanatha)(156) 422
Tropomyosin
    Interaction of troponin with F-actin and its abolition by --- (Drabikowski, Nonomura) (160) 129
Troponin
    Interaction of --- with F-actin and its abolition by tropomyosin (Drabikowski, Nonomura)(160) 129
Trypsin
    Binding of --- and chymotrypsin by human intestinal mucosa (Goldber, Campbell, Roy) (167) 613
Trypsin
    Biochemistry of rabbit α_1-macroglobulin. IV. Effect on the esterase activity of --- and chymotrypsin (Berthillier, Got, Bertagnolio)(170) 140
Trypsin
    Convenient titrant for α-chymotrypsin and --- (Knowles, Preston)(151) 290
Trypsin
    Influence of ionic strength on the activity of --- and acetyltrypsin (Béchet et al.) (151) 165
Trypsin
    Reduction and reoxidation of turkey ovomucoid–a protein with dual and independent inhibitory activity against --- and α-chymotrypsin (Sjöberg, Feeney)(168) 79
Trypsin
    Ribonuclease and --- treatment of ribosomes and polyribosomes from see urchin eggs (Piatigorsky)(166) 142
Trypsin
    Structural properties of trypsinogen and ---. Alkylation and oxidation of methionines (Holeysovsky, Lazdunski)(154) 457
Trypsin inhibitor
    Amino acid sequence of a --- isolated from ascaris (Ascaris lumbricoides var. suum) (Fraefel, Acher)(154) 615
Trypsin inhibitors
    Properties of enzymatically cleaved --- (Haynes, Feeny)(159) 209
Trypsinogen
    Structural properties of --- and trypsin. Alkylation and oxidation of methionines (Holeysovsky, Lazdunski)(154) 457
Tryptophan
    Third dissociation constant for --- (Armstrong)(158) 174
Tryptophan fluorescence
    Fluorescence and protein structure. XV. --- in a helical muscle protein (Cowgill) (168) 431
Tryptophan–nicotinic acid ribonucleotide pathway
    Transport and further metabolism of intermediate compounds of the --- by rat small intestine (Rose, Yao, Brown)(163) 93
Tryptophan operon
    Transcription of the --- of Escherichia coli in vitro. I. Detection and quantitative determination of specific RNA (Yura et al.) (169) 494
Tryptophan pyrrolase
    --- activity during pregnancy (Greengard, Kalinsky, Manning)(156) 198
Tryptophan pyrrolase
    Adaptive response of --- and tyrosine transaminase in rat liver after partial hepatectomy and laparotomy (Tsukada et al.) (165) 218
Tryptophan pyrrolase
    Fish liver ---: The apparent absence of both hormonal regulation and substrate induction (Brown, Dodgen)(165) 463
Tryptophan pyrrolase
    Induction of hepatic --- and tyrosine transaminase by histones and other polypeptides (Caffery, Whichard, Irvin)(157) 616
Tryptophan pyrrolase
    Liver --- activity during thyroxine-induced metamorphosis of Rana catesbeiana (Paik, Christinzio, Kim)(167) 209
Tryptophan pyrrolase
    Studies on bacterial and liver --- (Tokuyama)(151) 76
Tryptophan synthase
    --- from Nicotiana tabacum (Delmer, Mills) (167) 431
Turnip mosaic virus
    Purification of --- by gel filtration (Jacoli) (165) 299
Turnover
    Protein --- and macromolecular synthesis during growth and gametic differentiation in Chlamydomonas reinhardtii (Jones, Kates, Keller)(157) 589
m-Tyramine
    Production of --- from L-phenylalanine by rat liver preparations (Coulson, Henson, Jepson)(156) 135
Tyrocidine
    Biosynthesis of --- by a cell-free enzyme system of Bacillus brevis ATCC 8185. I. Preparation of partially purified enzyme system and its properties (Fujikawa, Suzuki, Kurahashi)(161) 232
Tyrocidine
    --- biosynthesis by a cell-free enzyme system of Bacillus brevis ATCC 8185. II. Amino acid substitution in tyrocidine (Fujikawa et al.)(169) 520
Tyrosine
    Biosynthesis of phenylalanine and --- in the pea (Pisum sativum): Chorismate mutase (Cotton, Gibson)(156) 187
Tyrosine
    Conversion of phenylalanine to --- in the bovine mammary secretory cell (Jorgenson, Larson)(165) 121
Tyrosine biosynthesis
    --- in Aerobacter aerogenes: Evidence for a subunit structure of the protein converting chorismate into 4-hydroxyphenyl pyruvate (Cotton, Gibson)(160) 188
Tyrosine fluorescence
    Fluorescence and protein structure. XIV. --- in helical muscle proteins (Cowgill) (168) 417
Tyrosine–α-ketoglutarate transaminase
    Studies on --- from bovine thyroid and liver tissue (Igo, Mahoney, Limbeck)(151) 88
Tyrosine residues
    Reaction of --- in proteins with carbodiimide reagents (Carraway, Koshland Jr.) (160) 272
Tyrosine transaminase
    Adaptive response of tryptophan pyrrolase and --- in rat liver after partial hepatectomy and laparotomy (Tsukada et al.) (165) 218
Tyrosine transaminase
    Induction of hepatic tryptophan pyrrolase and --- by histones and other polypeptides

(Caffery, Whichard, Irvin)(157) 616

Tyrosine transaminase

Modified induction of hepatic --- in 8-azaguanine-treated rats (Levitan, Webb) (155) 632

Tyrosyl acetylation

Effect of a competitive inhibitor on the --- and lysyl acetylation of staphylococcal nuclease (Cuatrecasas, Fuchs, Anfinsen) (159) 417

U

- Ubiquinone
  - Use of a --- -deficient mutant in the study of malate oxidation in Escherichia coli (Cox, Snoswell, Gibson)(153) 1
- Ubiquinone metabolism
  - Effect of cold exposure on the --- in the rat (Aithal, Joshi, Ramasarma)(162) 66
- Ubiquinone metabolism
  - --- in relation to vitamin A status in the rat (Lakshmanan et al.)(170) 392
- Ubiquinone-10
  - Requirement of --- for the ATP-forming system and ATPase system of chromatophores from Rhodospirillum rubrum (Horio et al.)(153) 913
- Ultracentrifugation
  - Inexpensive, high capacity gradient-forming device for zonal --- (Paris)(165) 286
- Ultraviolet inactivation
  - --- of amino acid acceptance of transfer RNA (Wade et al.)(161) 469
- Ultraviolet inactivation
  - --- of Escherichia coli ribosomes. II. Effects of messenger RNA binding on ultraviolet sensitivity of ribosomes (Tokimatsu et al.) (169) 363
- Ultraviolet-irradiated denatured DNA
  - Trans-syn thymine dimers in ---: Identification and photoreactivability (Ben-Hur, Ben-Ishai)(166) 9
- Ultraviolet irradiation
  - Genetic transformation of the bacteriophage T4. III. Influence of --- and nitrous acid on the biological activity of isolated T4 DNA (Veldhuisen, Poelman, Cohen) (161) 115
- Ultraviolet irradiation
  - --- studies on the cytoplasmic determinant of yeast mitochondrion (Maroudas, Wilkie) (166) 681
- Ultraviolet light
  - Evidence for repair replication of HeLa cell DNA damaged by --- (Cleaver, Painter) (161) 552
- Ultraviolet radiation
  - Pitfalls of measuring DNA synthesis kinetics as exemplified in --- studies (Smith, O'-Leary)(169) 430
- Ultraviolet radiation
  - Search for a mechanism for the increased sensitivity of 5-bromouracil-substituted DNA to --- (Lion)(155) 505
- Ultraviolet resistance
  - --- of DNA in spore spheroplasts of Bacillus subtilis as measured by the transforming activity (Tanooka)(166) 581
- Uncouplers
  - Photosynthetic phosphorylation and associated reactions in the presence of a new group of ---: Salicylanilides (Black Jr.) (162) 294
- Uncoupling agents
  - Effect of 2,4-dinitrophenol and other --- on the nitrate assimilation and nitrite assimilaon by Chlorella (Ahmed, Morris)(162) 32
- Uncoupling reagents
  - Structural changes in mitochondria induced by ---. The response to snake venom phospholipase A (Weinbach, Garbus) (162) 500
- Urate
  - Binding of --- to proteins of human and rabbit plasma (Sheikh, Møller)(158) 456
- Urate:oxygen oxidoreductase
  - Studies on bacterial ---. I. Purification and properties of the enzyme (Arima, Nose) (151) 54
- Urate:oxygen oxidoreductase
  - Studies on bacterial ---. II. Observations concerning the properties and components of the active site (Nose, Arima) (151) 63
- Urease
  - Absence of gastric --- in germ-free animals (Delluva, Markley, Davies)(151) 646
- Urease
  - Temperature effects on the acid hydrolysis of glucose 1-phosphate and --- hydrolysis of urea (Miller et al.)(167) 607
- Uridine
  - Incorporation of labelled --- into mouse liver protein (Sakai, Kihara)(157) 630
- Uridine diphosphate-N-acetylhexosaminuronic acid
  - Occurrence of --- in a mutant strain of Achromobacter georgiopolitanum n sp. (Smith)(158) 470
- Uridine disphosphate-N-acetylmuramyl-L-alanyl-D-glutamyl-meso-2,6-diaminopimelic acid
  - Preparation and characterization of --- (Nakatani, Araki, Ito)(156) 210
- Uridine diphosphate-apiose
  - D-Apiose biosynthesis. IV. Formation of --- from uridine diphosphate-D-glucuronic acid in cell-free extracts of parsley (Apium petroselium L.) and Lemna minor (Sandermann Jr., Tisue, Grisebach)(165) 550
- Uridine diphosphate-apiose
  - Occurrence of --- in parsley (Apium petroselium L.) (Sandermann, Grisebach) (156) 435
- Uridine diphosphate-D-glucose dehydrogenase
  - --- of hen oviduct (Bdolah, Feingold) (159) 176
- Uridine diphosphate-glucose 4-epimerase
  - Specificity of --- from the yeast Saccharomyces fragilis (Salo et al.)(151) 484
- Uridine diphosphate-glucose-glycogen synthetase
  - ---activity in human leucocytes (Williams, Lundholm)(158) 465
- Uridine diphosphate-glucose pyrophosphorylase
  - Studies on the thyroidal ---: Partial purification and some of its properties (Rodriguez et al.)(151) 694
- Uridine diphosphate-D-glucuronic acid
  - D-Apiose biosynthesis. IV. Formation of uridine diphosphate-apiose from --- in cell-free extracts of parsley (Apium petroselium L.) and Lemna minor (Sandermann Jr., Tisue, Grisbach)(165) 550
- Uridine kinase
  - Increase of --- activity in Escherichia coli B

following phage T_2 infection or chloramphenicol treatment (Pravdina, Galegov) (166) 279

Uridine transport
--- and incorporation into nucleic acids in Escherichia coli (Bremer, Yuan) (169) 21

Uridylyl-(3'-5')-4-thiouridine
Synthesis and properties of 4-thiouridylyl-(3'-5')-4-thiouridine, 4-thiouridylyl-(3'-5')-uridine and --- (Scheit) (166) 285

Uronic acids
Glycolipids containing glucose and --- in Pseudomonas species (Wilkinson) (152) 227

Uroporphyrins
Non-enzymatic chelation of divalent metals with --- under physiological conditions (Frydman, Stevens) (165) 167

Uroporphyrinogen III cosynthetase
Isolation and properties of wheat germ --- (Stevens, Frydman) (151) 429

Uroporphyrinogen III cosynthetase
Separation of porphobilinogen deaminase and --- from human erythrocytes (Stevens, Frydman, Frydman) (158) 496

Uteroglobin
---: Hormone-sensitive endometrial protein involved in blastocyst development (Beier) (160) 289

V

- Valine biosynthesis
  - Control of isoleucine biosynthesis, --- and leucine biosynthesis. V. Dual effect of α-aminobutyric acid on repression and end-product inhibition in Escherichia coli (Freundlich, Clarke)(170) 271
- Valine transfer RNA
  - Different anticodons in purified --- fractions from yeast (Mirzabekov et al.)(166) 75
- Valine transfer RNA$_1$
  - Binding of --- fragments to 70-S, 50-S and 30-S ribosomal particles (Mirzabekov, Grünberger, Bayev)(166) 68
- Valine transport
  - Amino acid transport by the small intestine of the rat. Effects of glucose on transintestinal proline transport and --- (Munck) (150) 82
- Valinomycin-stimulated glycolysis
  - --- in Ehrlich ascites tumour cells (Gordon, De Hartog)(162) 220
- Valyl-seryl-lysine
  - Studies on polynucleotides. LXXXIII. Synthesis in vitro of the tripeptide --- directed by poly r-(G-U-A-A)(Kössel)(157) 91
- Vancomycin
  - Adsorption of --- by sensitive and resistant organisms (Best et al.)(165) 558
- Vasopressin
  - Effect of sodium transport and --- on the oxidation of palmitic acid by the toad bladder (Ferguson, Handler, Orloff)(163) 150
- Vasotocine
  - Neurohypophyseal hormones of reptiles. Isolation of mesotocine and --- from the viper Vipera aspis (Acher, Chauvet, Chauvet) (154) 255
- Veratrylglycerol-β-guaiacyl ether
  - Oxidation of guaiacylglycerol-β-guaiacyl ether and --- by Polyporus versicolor and Stereum frustulatum (Kirk, Harkin, Cowling)(165) 134
- Vibrio phage
  - Biophysical properties of a --- and its DNA (Mitra, Basu)(155) 143
- Vicia cracca
  - Non-specific phytohaemagglutinin found in --- (Aspberg, Holmén, Porath)(160) 116
- Vinyl ether linkage
  - Plasmalogen metabolism in developing rat brain: Aldehydes as a direct precursor in the formation of the --- (Bell Jr., White Jr.) (164) 441
- Viologens
  - Anomalies of --- in bases and water (Corwin, Arellano, Chivvis)(162) 533
- Vipera aspis
  - Neurohypophyseal hormones of reptiles. Isolation of mesotocine and vasotocine from the viper --- (Acher, Chauvet, Chauvet) (154) 255
- Viral messengers
  - Chain initiation during polypeptide synthesis in a cell-free bacterial system programmed with plant ---. I. Dependence on formylation and ribosomal factors (Reinecke et al.)(157) 566
- Viral messengers
  - Chain initiation during polypeptide synthesis in cell-free bacterial systems programmed with ---. II. The role of N-formylmethionine (Hoogendam et al.)(157) 579
- Viral RNA
  - Binding of aminoacyl-tRNA to complexes of Escherichia coli ribosomes and plant --- (Verhoef, Kraal, Bosch)(155) 456
- Viral RNA
  - Interaction between plant --- and Escherichia coli ribosomes (Van Duin et al.) (155) 444
- Viral RNA
  - Recognition of --- by mammalian ribosomes. An effect of interferon (Carter, Levy) (155) 437
- Virus inhibitory properties
  - Sialic acids of horse serum with special reference to their --- (Pepper)(156) 317
- Virus-RNA synthesis
  - Site of foot-and-mouth disease --- and some properties of its double-stranded RNA (Arlinghaus, Bachrach, Polatnick)(161) 170
- Visual process
  - Biochemical aspects of the ---. II. Schiff base formation in phosphatidylethanolamine monolayers upon penetration by retinaldehyde (De Pont, Daemen, Bonting)(163) 204
- Visual process
  - Biochemical aspects of the ---. III. Specificity of the retinaldehyde effect on cation movement in rod outer segments (Daemen, Bonting)(163) 212
- Vitamins
  - Effect of antivitamins on the microbiological biosynthesis of ---. III. Relation between amounts of thiamine, thiamine monophosphate and thiamine diphosphate in Saccharomyces cerevisiae under normal conditions and with oxythiamine in the culture medium (Sicho, Králová)(165) 459
- Vitamin A
  - Effect of --- and vitamin K on colon lysosomes (Perumal, Lakshmanan, Cama) (170) 399
- Vitamin A
  - Metabolism of ubiquinone in relation to --- status in the rat (Lakshmanan et al.) (170) 392
- Vitamin A deficiency
  - Comparative effects of --- and controlled food consumption on ATP:sulphate adenylyltransferase (Geison, Rogers Jr., Johnson) (165) 448
- Vitamin A esterase activity
  - Identity of --- of rat pancreatic juice (Erlanson, Borgström)(167) 629
- Vitamin B$_6$
  - Microbial formation of pyridoxine glucoside, a new derivative of --- (Ogata et al.) (165) 578
- Vitamin B$_{12}$
  - Electron donor-acceptor interactions of --- (Heathcote, Slifkin)(158) 167
- Vitamin B$_{12}$
  - Procedure for detaching bound --- from its transport proteins (Gräsbeck et al.)

(158) 292

Vitamin B_{12}
  Studies on the effect of orotic acid on nucleic acid metabolism in --- -deficient chick liver (Caldarera et al.)(161) 156

Vitamin B_{12} 5'-phosphate
  Formation of --- during bacterial conversion of factor A to vitamin B_{12} (Ohlenroth, Friedmann)(170) 465

Vitamin D
  Effect of --- on L-histidine transport by intestine (Sugai, Matsuda)(170) 474

Vitamin D
  Effect of parathyroid hormone in vivo on the labelling of nuclear RNA from the intestinal mucosa and liver of --- -deficient and normal chicks (Hamilton, Detert, Cohn)(155) 311

Vitamin E deficiency
  --- and fatty acid turnover in erythrocyte membranes (Oliveira, Nason)(150) 319

Vitamin K
  Effect of vitamin A and --- on colon lysosomes (Perumal, Lakshmanan, Cama) (170) 399

Vitreous humor
  Light-scattering patterns of the --- (Bettelheim, Balazs)(158) 309

Voltage-clamp
  --- and current-clamp studies on the action potential in Nitella translucens (Williams, Bradley)(150) 626

W

Water permeability
  Kinetic analysis of the effect of oxytocin on the --- of frog bladder. Role of adenosine 3',5'-monophosphate (Bourguet)(150) 104
Water transport
  Lens as an osmometer and the effects of medium osmolarity on ---, ^{86}Rb efflux and rubidium transport by the lens (Cotlier, Kwan, Beaty)(150) 705
Waxes
  Isolation and analysis of two types of diester --- from the skin surface lipids of the rat (Nikkari, Haahti)(164) 294
Wax D
  Significance of the size of the polysaccharide portion for adjuvanticity of a peptidoglycolipid (---) of Mycobacteria (Koga et al.)(158) 144
Wax D
  Structure of the polysaccharide of --- from human strain of Mycobacterium tuberculosis (Vilkas, DeLaumeny, Nacasch) (158) 147
Wool structure
  Nuclear magnetic resonance spectra of bis(2-amino-2-carboxyethyl)trisulphide and other sulphur-containing amino acids relevant to --- (Bartle et al.)(160) 106

X

Xanthine
  Evidence for an alternative pathway of --- oxidation in Aspergillus nidulans (Darlington, Scazzocchio)(166) 569
Xanthine dehydrogenase
  Multiple molecular forms of --- and related enzymes. II. Conversion of one form of xanthine dehydrogenase to another by extracts of Drosophila melanogaster (Shinoda, Glassman)(160) 178
Xanthine oxidase
  Electron spin resonance of non-haem iron in --- (Gibson, Bray)(153) 721
Xanthophylls
  Light induced $^{18}O_2$ uptake by epoxy --- in New Zealand spinach leaves (Tetragonia expansa)(Takeguchi, Yamamoto)(153) 459
Xenopus laevis
  Oestrogen-induced calcium-binding protein in --- (Munday et al.)(166) 748
Xenopus laevis
  Site of phosvitin synthesis in --- (Rudack, Wallace)(155) 299
X-ray diffraction
  Comparative --- and electron-microscope studies of isolated mitochondrial membranes (Thompson, Coleman, Finean)(150) 405
X-ray diffraction
  Studies on lecithin-cholesterol-water interactions by differential scanning calorimetry and --- (Ladbrooke, Williams, Chapman)(150) 333
X-ray diffraction
  --- study of phage SPO-1 DNA (Higuchi, Iitaka, Tsuboi)(166) 717
D-Xylose isomerase
  Purification, crystallization and properties of the --- from Lactobacillus brevis (Yamanaka)(151) 670
β-Xylosidase
  Identity of β-glucosidase, --- and one of the β-glactosidase activities in human liver when assayed with 4-methylumbelliferyl-β-D-glycosides. Studies in cases of Gaucher's disease (Ockerman)(165) 59
β-Xylosidase
  Purification of --- and its action of O-β-xylosyl L-serine and stem bromelain glycopeptide (Fukuda et al.)(159) 215
O-β-Xylosyl L-serine
  Purification of β-xylosidase and its action on --- and stem bromelain glycopeptide (Fukuda et al.)(159) 215

Y

Yeast alanine transfer RNA
  Modification of nucleosides and nucleotides. X. Evidence for the important role of inosine residue in codon recognition of --- (Yoshida, Kaziro, Ukita)(166) 646
Yeast mitochondrion
  Ultraviolet irradiation studies on the cytoplasmic determinant of --- (Maroudas, Wilkie)(166) 681
Yeast RNA
  Action of acetic anhydride upon ---'s in dimethylformamide (Keith, Ebel)(166) 16
Yeast transfer RNA
  Modification of nucleosides and nucleotides. IX. Inactivation of coding response of --- containing inosine residue by cyanoethylation (Yoshida et al.)(166) 636

Z

Zea mays
  Sedimentation studies on RNA from proplastids of --- (Jacobson, Williams)(169) 7
Zinc
  --- effect on physical properties of bovine carbonic anhydrase (Brewer, Spencer, Ashworth)(168) 359
Zinc
  Mechanism of the inhibitory effect of --- on the oxygen-induced synthesis of the yeast respiratory system (Ohaniance, Chaix) (170) 435
Zinc
  Role of --- and nickel in ribosome structure (Tal)(169) 564
Zonal ultracentrifugation
  Inexpensive, high capacity gradient-forming device for --- (Paris)(165) 286
Zymogen granules
  Release of amylase from --- by ATP and a low concentration of Ca^{2+} (Yoshida et al.) (158) 489

COPYRIGHT © 1969 BY
ELSEVIER PUBLISHING COMPANY, AMSTERDAM
PRINTED IN THE NETHERLANDS